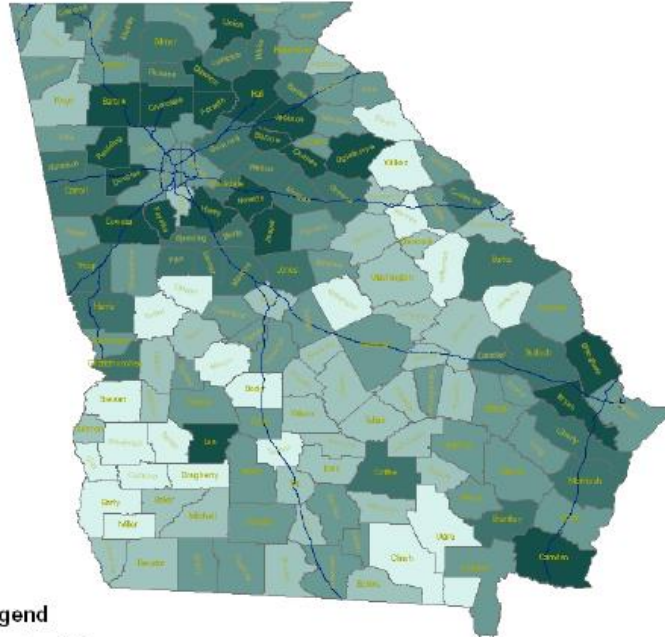


2030



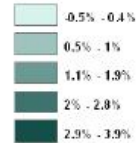
**Resiliency & Growth**

## Average Annual Change in Population Georgia Counties: 2010 - 2030



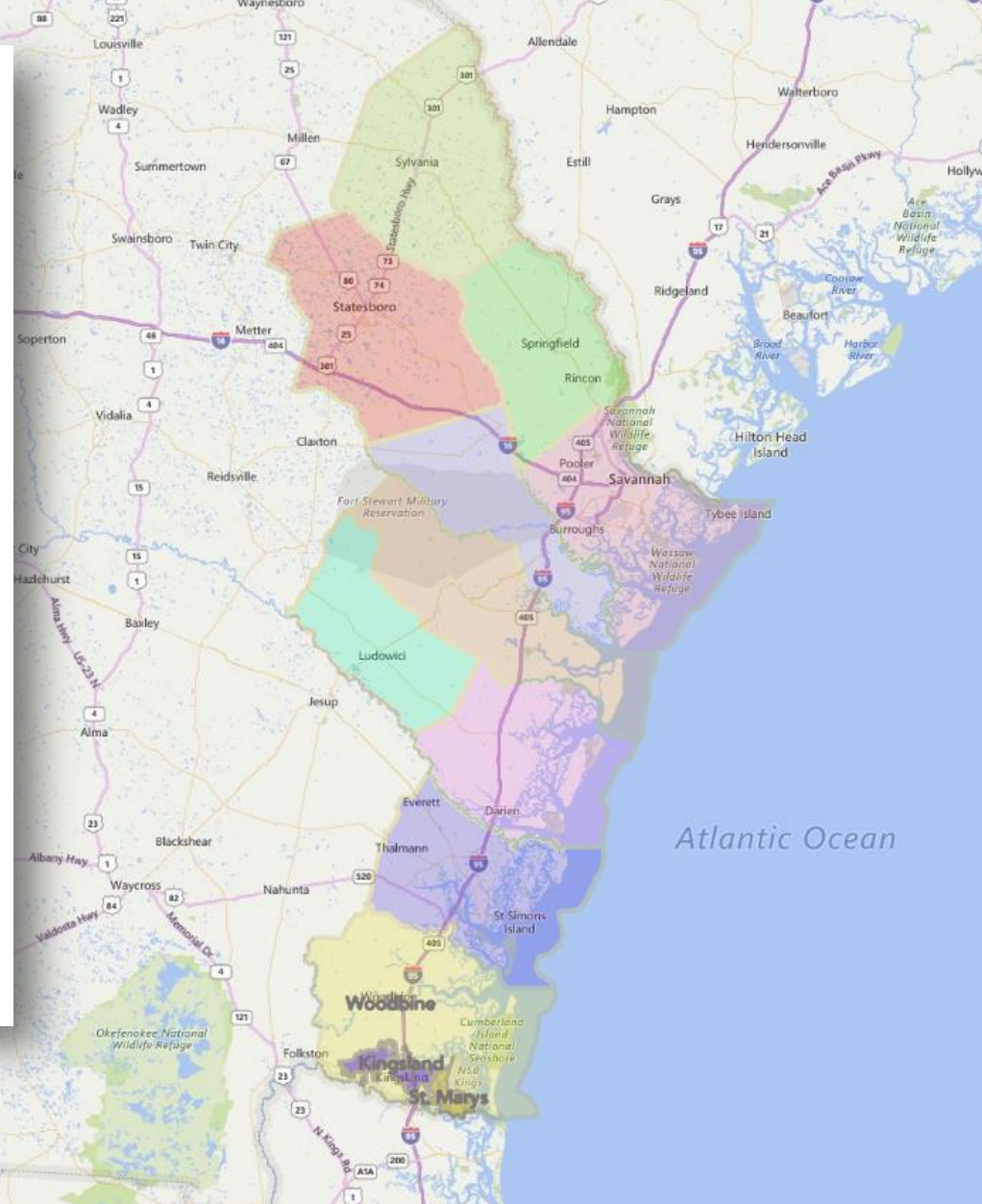
### Legend

#### Average Annual Change



Interstates

Carl Vinson Institute of Government  
Governor's Office of Planning and Budget

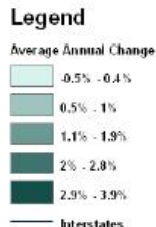
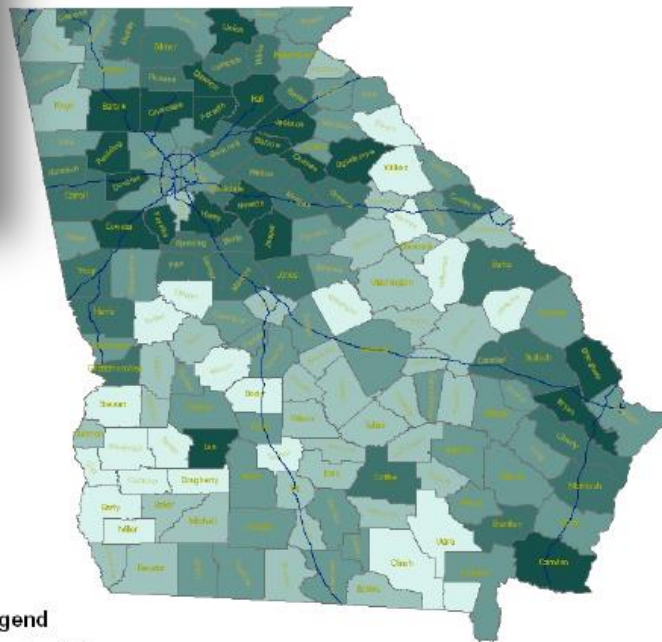


# Cities 2010

# Future Growth



Average Annual Change in Population  
Georgia Counties: 2010 - 2030



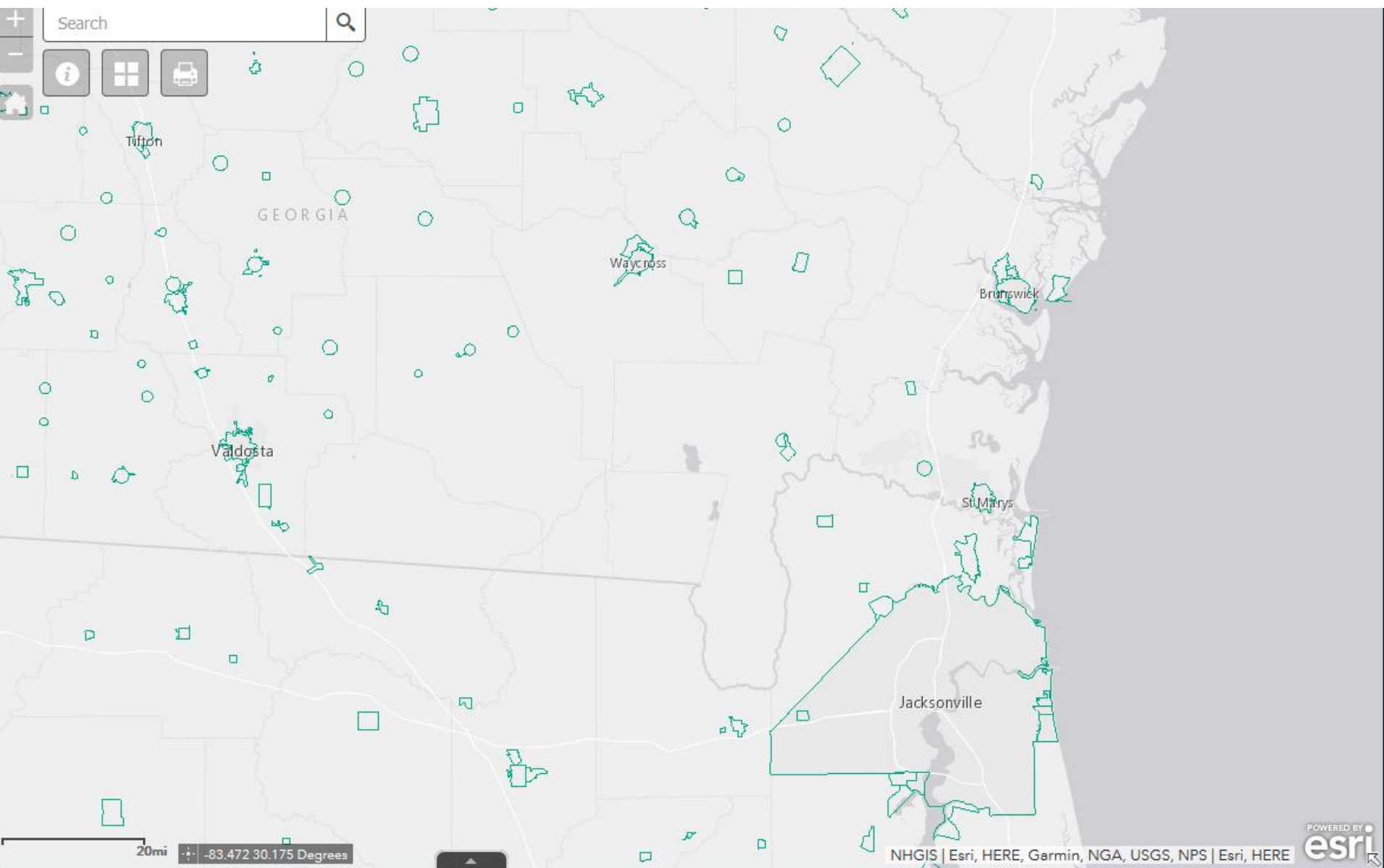
Carl Vinson Institute of Government  
Governor's Office of Planning and Budget

Industry and Commercial demand/usage			
Day/Night Time Population	Seasonal Population	Training Centers	Recreation
Tourism		Conference Centers	Special Events
<b>Residential Population Projections</b> People living in homes, apartments, group quarters (e.g. Dorms, Prisons, Nursing homes)			

## Camden County

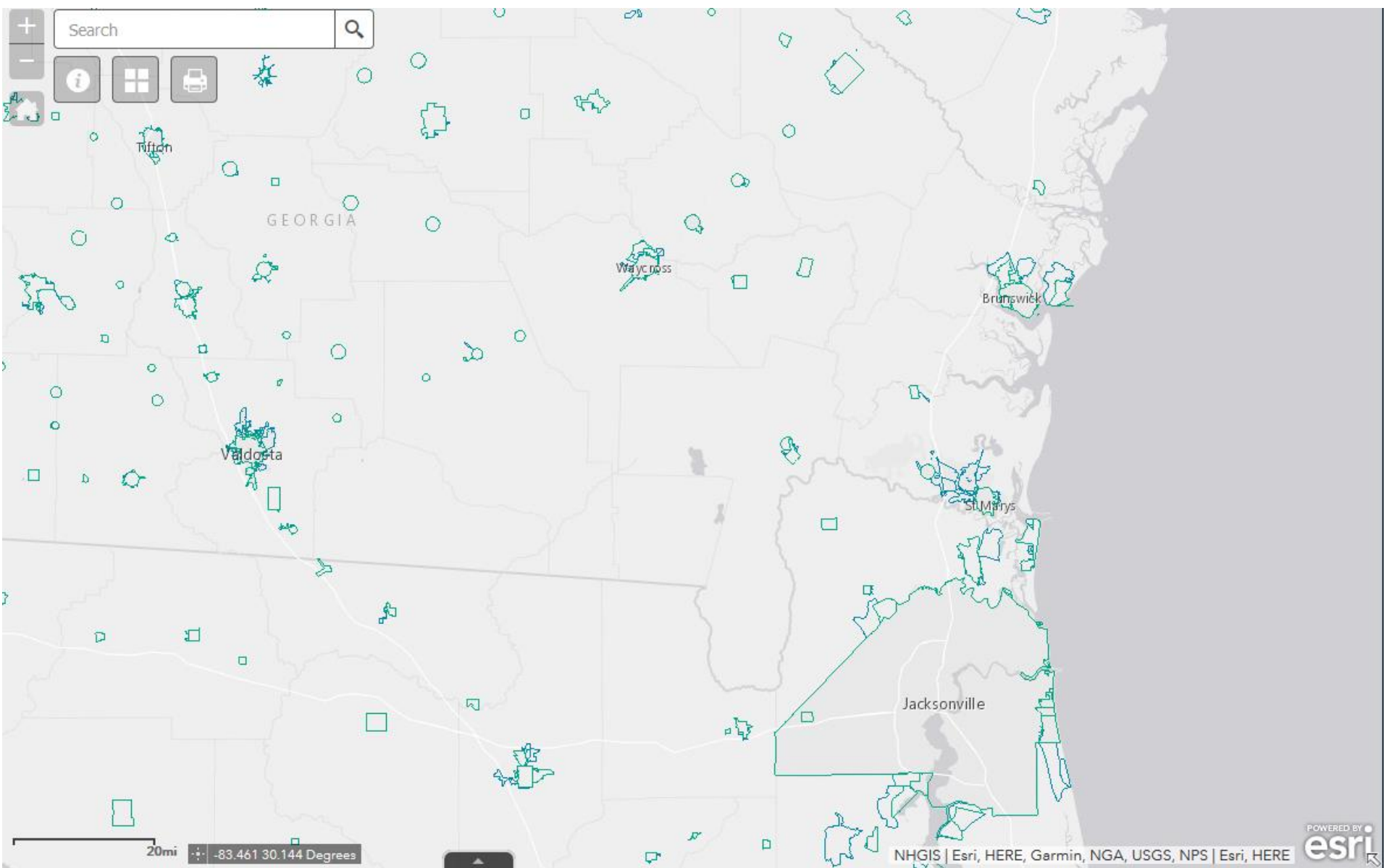
2010	50,515
2020	70,548
2030	96,743

+46,228

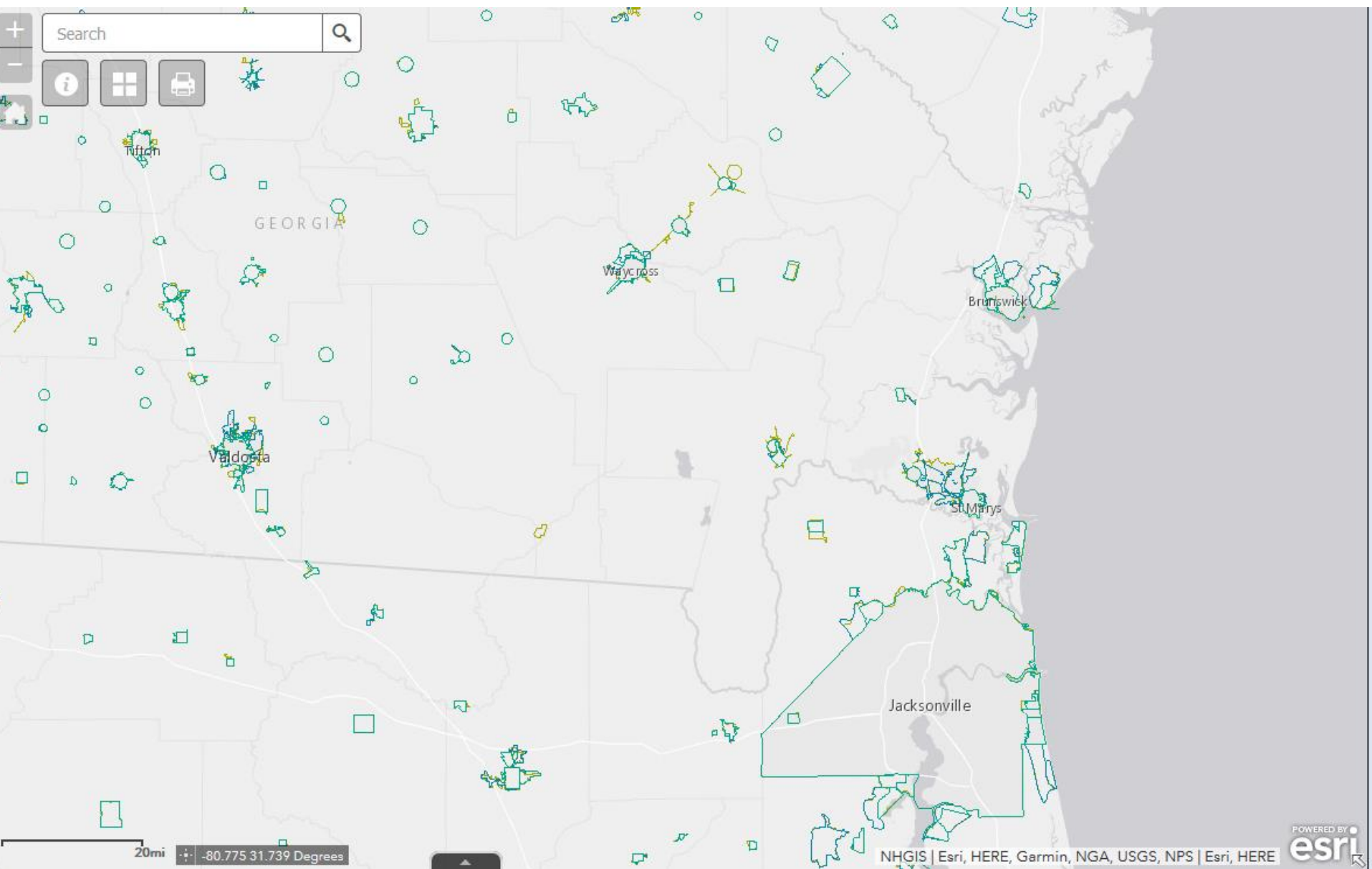


# Region 1980

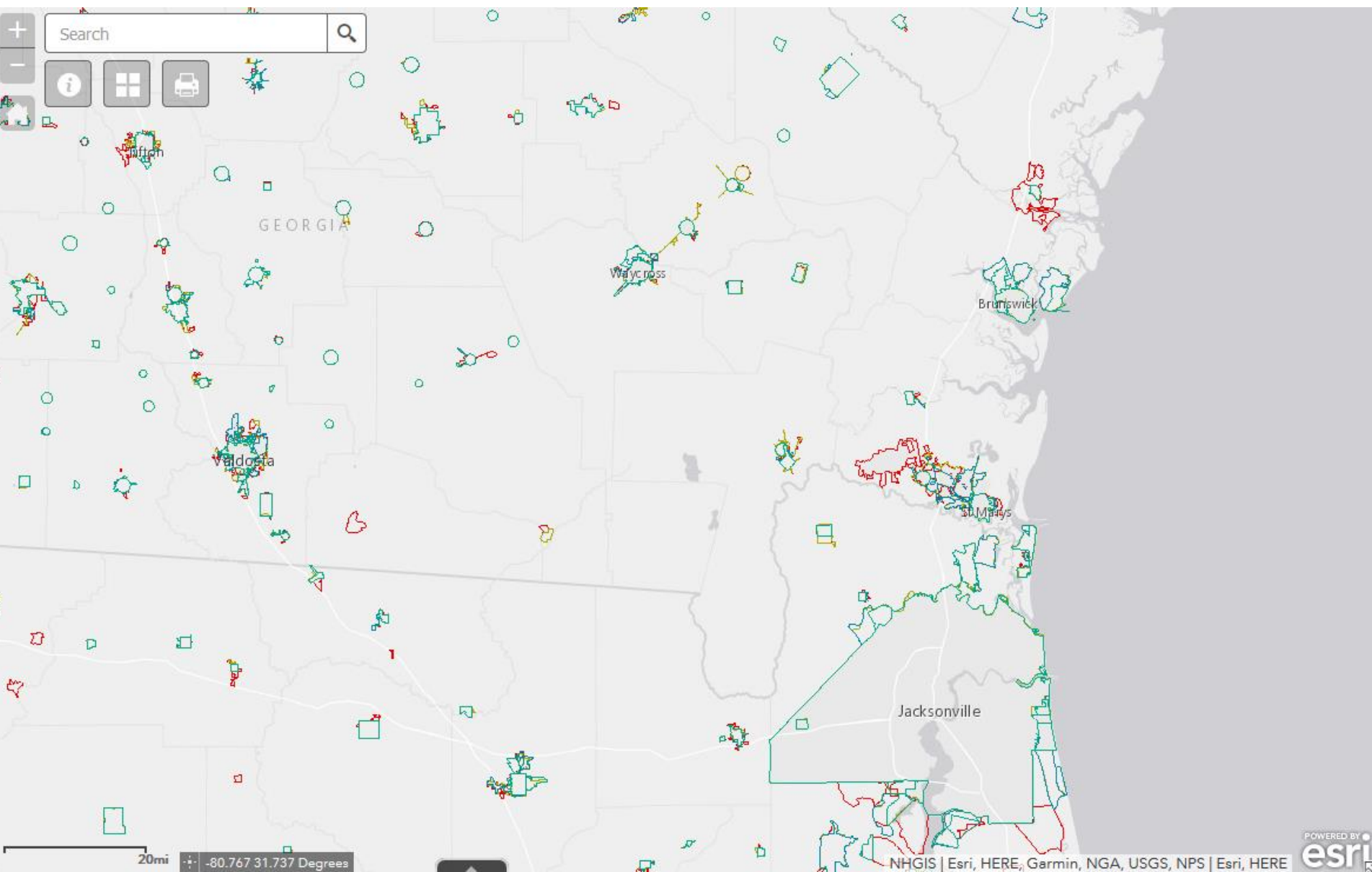




# Region 1 1990

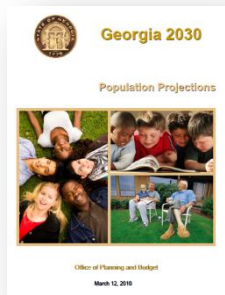


# Region 2000

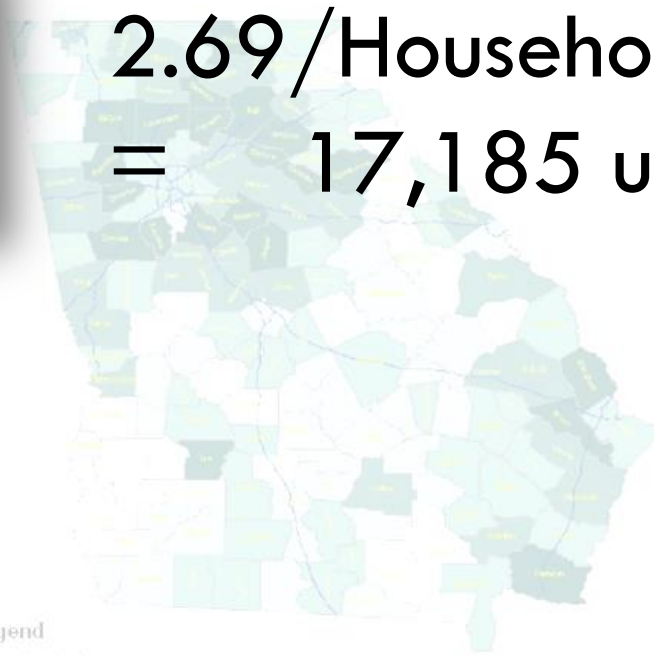


# Region 2010

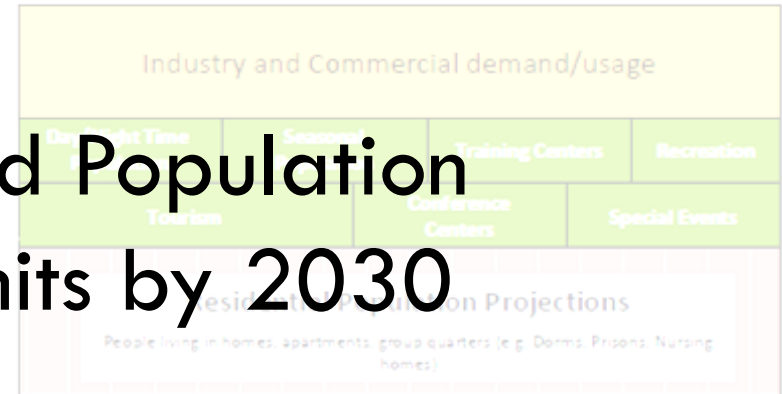
# Future Growth



Average Annual Change in Population  
Georgia Counties: 2010 - 2030



2.69/Household Population  
= 17,185 units by 2030



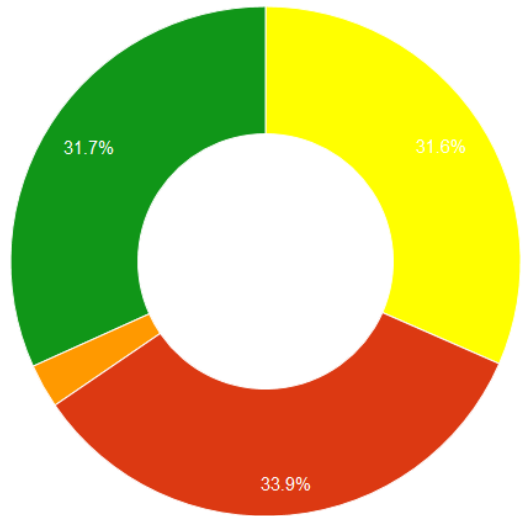
## Camden County

2010	50,515
2020	70,548
<b>2030</b>	<b>96,743</b>

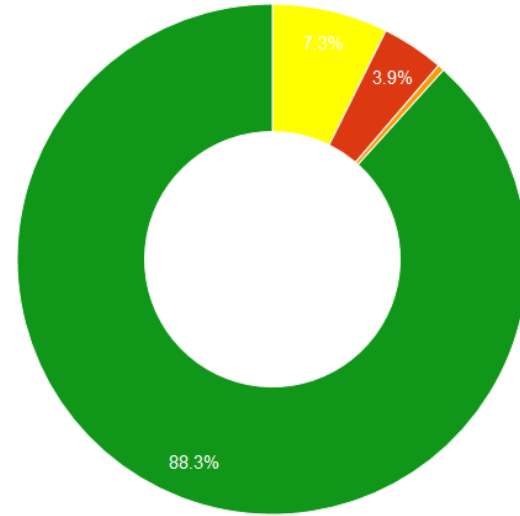
**+46,228**



2010 Population Comparison



Land Comparison

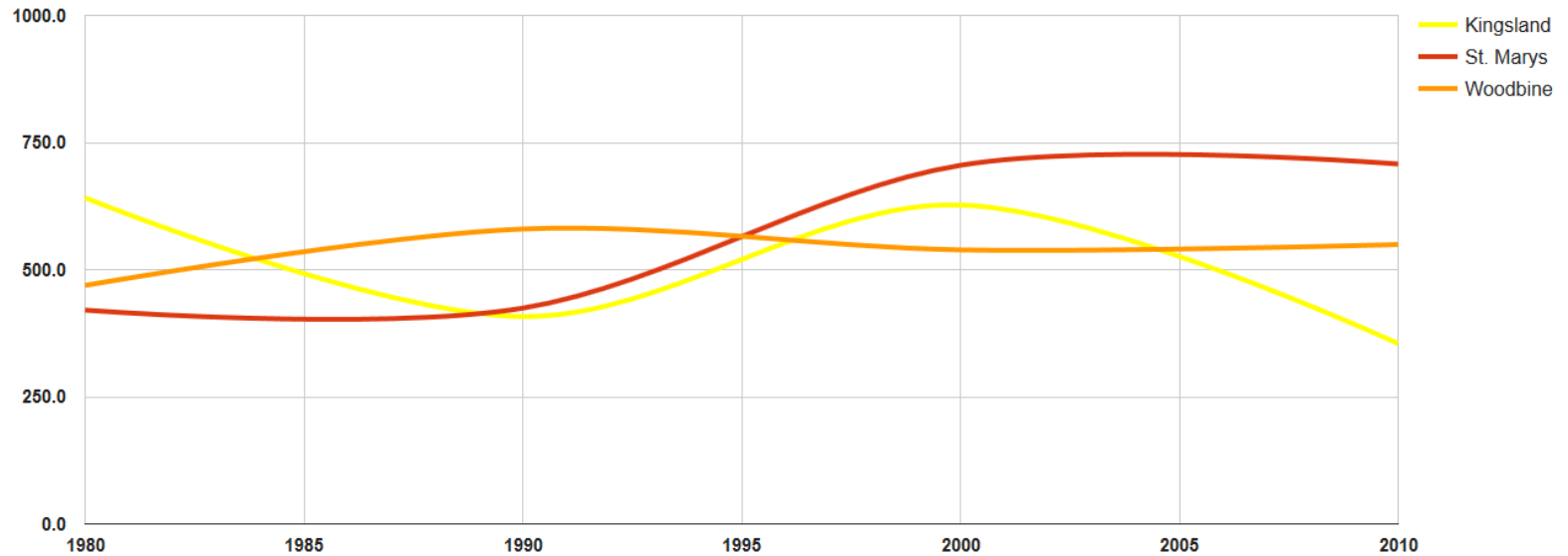


- Kingsland
- St. Marys
- Woodbine
- Uninc.

Region 2010

2010 I

## Densities



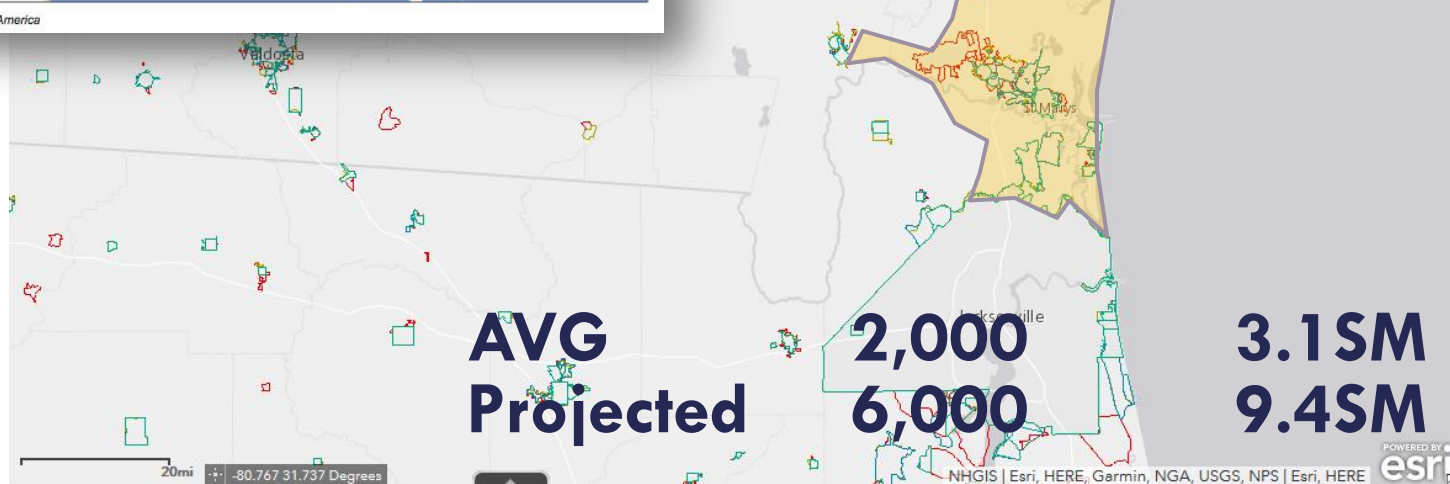
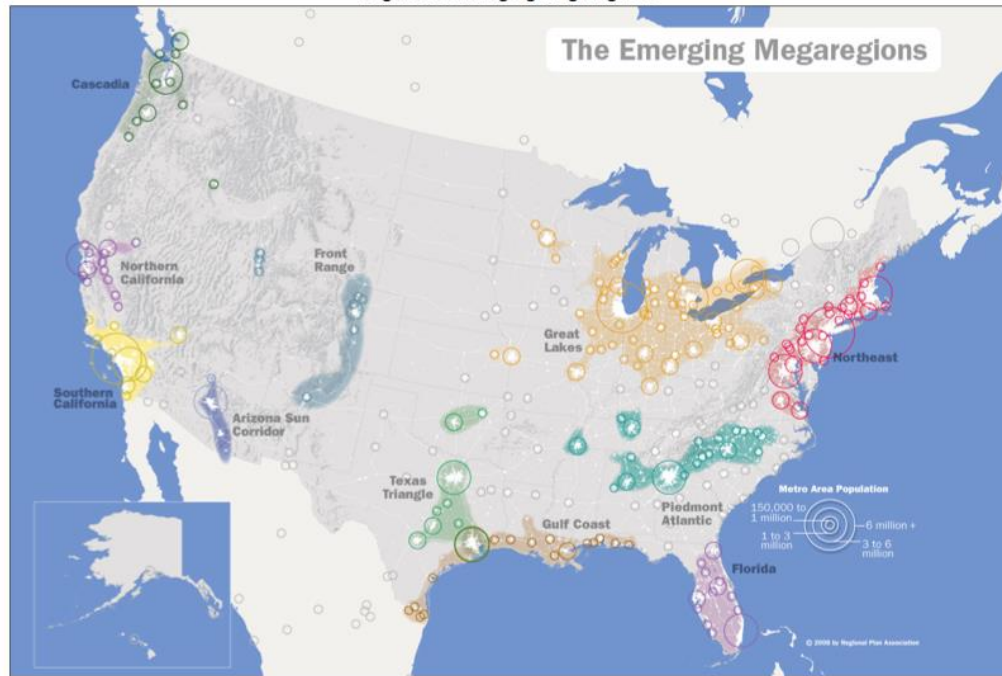
Kingsland  
St. Marys  
Woodbine  
Uninc.

33.9%

88.3%

# Region 2010

Figure 1. Emerging Megaregions



Region 2030

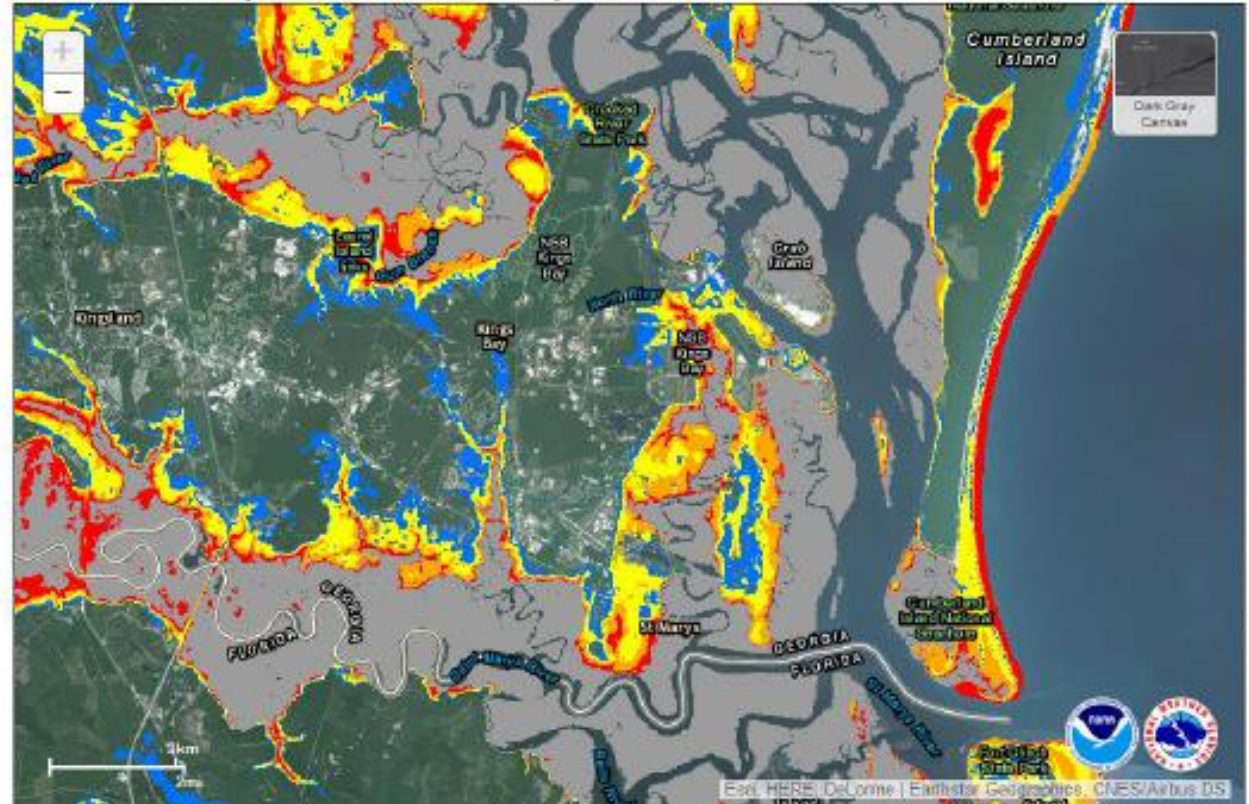
# Hurricane Matthew: 18HRS Out

## Potential Storm Surge Flooding Map (Inundation)

NHC Potential Storm Surge Flooding Map

Hurricane MATTHEW (2016) Advisory 34

From 11 AM EDT Thursday October 06 to 05 PM EDT Sunday October 09



### Potential Storm Surge Flooding\*

- Intertidal Zone/Estuarine Wetland
- Greater than 1 foot above ground
- Greater than 3 feet above ground
- Greater than 6 feet above ground
- Greater than 9 feet above ground

### Map Layer Options:

Inundation Layer Only

Inundation with Intertidal Layer

Map Opacity Slider

Download GIS data  
(Instructions)

Inundation Layer Only

Inundation with Intertidal Layer



# Storm Surge Modeling: Cat 1

### Storm Surge Inundation (SLOSH Maximum of Maximums)

This web map displays a seamless national map of near worst case storm surge flooding (inundation) scenarios using the National Weather Service (NWS) SLOSH model maximum of maximums (MOMs) product for different hurricane wind categories at a high tide



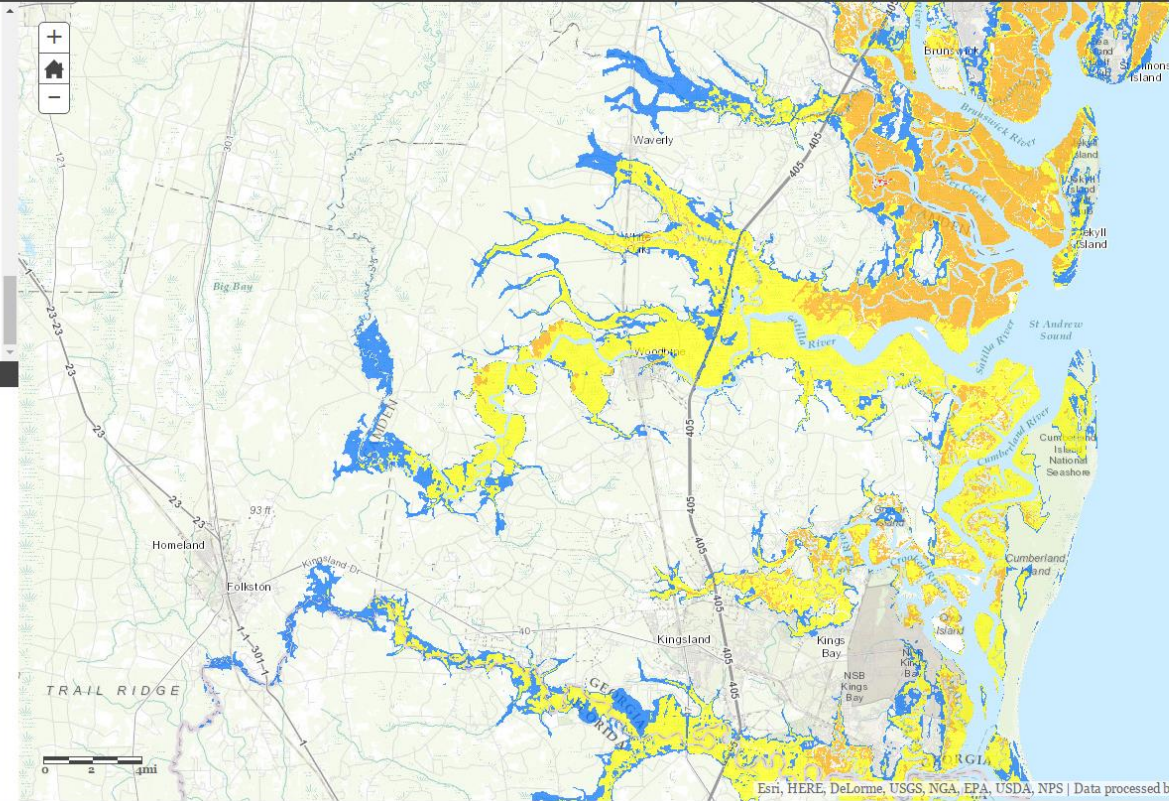
Category 1	Category 2
<p>Link to merge 27 of the 50 national SLOSH grids to build a seamless national map of storm surge hazard scenarios using the MOM product. Each grid for the Category 1-5 SLOSH MOMs are merged into one national grid. The national grid is then resampled, interpolated, and processed with a DEM (Digital Elevation Model, i.e. topography) to compute the storm surge hazard above ground for each hurricane category.</p>	

The diagonal hatched areas represent certain levee areas, such as the Hurricane and Storm Damage Risk Reduction System in Louisiana. These areas are highly complex and this product should not be used to assess the storm surge hazard within these areas. Please consult local emergency management officials for information on the risk of storm surge flooding within these areas. Not all levee areas are included in this analysis – in particular, local features such as construction walls, levees, berms, pumping systems, or other mitigation systems found at the local level may not be included in this analysis. Additionally, some marshy or low lying areas are not mapped in this analysis.

### LEGEND

**Category 1 (SLOSH MOMs) Storm Surge Inundation**  
Inundation Depth

- Up to 3 feet above ground
- Greater than 3 feet above ground
- Greater than 6 feet above ground
- Greater than 9 feet above ground
- Levee Areas - Consult Local Officials For Flood Risk



Esri, HERE, DeLorme, USGS, NGA, EPA, USDA, NPS | Data processed by the National Hurricane Center (NHC) Sto...





# Storm Surge Modeling: Cat 2

## Storm Surge Inundation (SLOSH Maximum of Maximums)

This web map displays a seamless national map of near worst case storm surge flooding (inundation) scenarios using the National Weather Service (NWS) SLOSH model maximum of maximums (MOMs) product for different hurricane wind categories at a high tide



Category 1 Category 2 Category 3 Category 4 Category 5

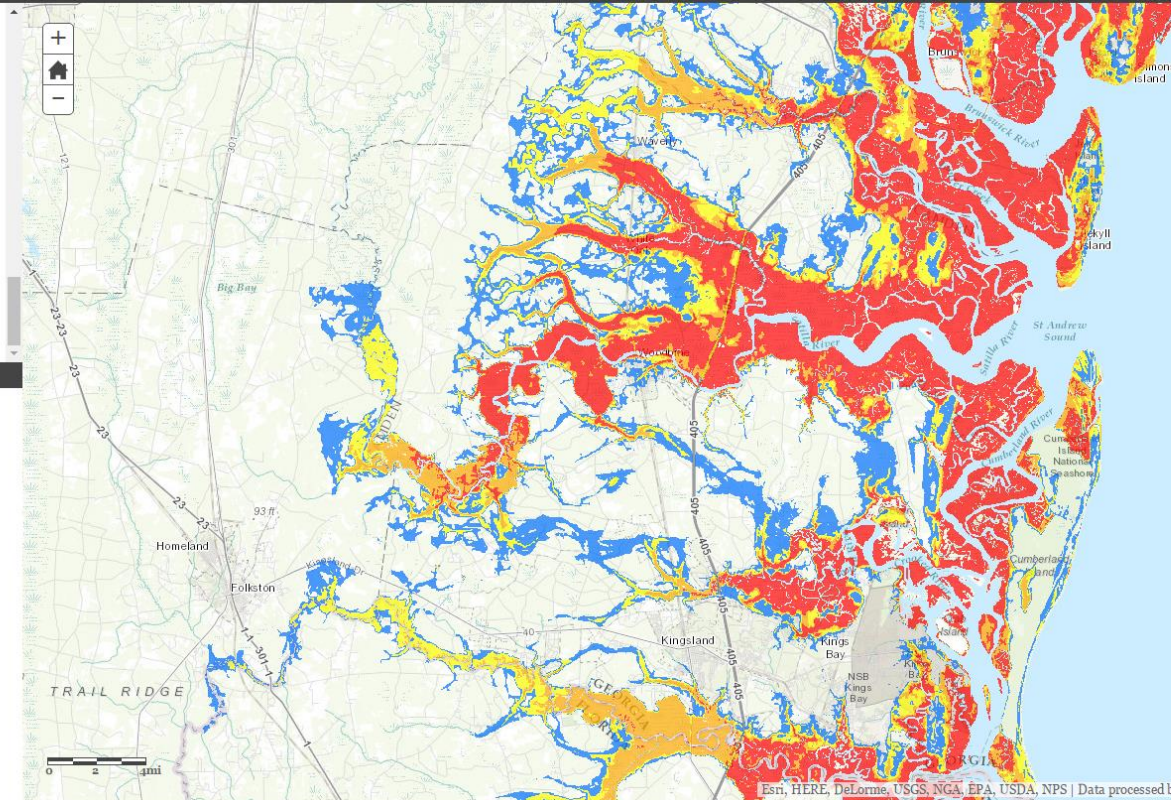
Click to merge 2 of the operational SLOSH grids to build a seamless national map of storm surge hazard scenarios using the MOM product. Each grid for the Category 1-5 SLOSH MOMs are merged into one national grid. The national grid is then resampled, interpolated, and processed with a DEM (Digital Elevation Model, i.e. topography) to compute the storm surge hazard above ground for each hurricane category.

The diagonal hatched areas represent certain levee areas, such as the Hurricane and Storm Damage Risk Reduction System in Louisiana. These areas are highly complex and this product should not be used to assess the storm surge hazard within these areas. Please consult local emergency management officials for information on the risk of storm surge flooding within these areas. Not all levee areas are included in this analysis – in particular, local features such as construction walls, levees, berms, pumping systems, or other mitigation systems found at the local level may not be included in this analysis. Additionally, some marshy or low lying areas are not mapped in this analysis.

### LEGEND

#### Category 2 (SLOSH MOMs) Storm Surge Inundation

- Inundation Depth
- Up to 3 feet above ground
  - Greater than 3 feet above ground
  - Greater than 6 feet above ground
  - Greater than 9 feet above ground
- Levee Areas - Consult Local Officials For Flood Risk



Esri, HERE, DeLorme, USGS, NGA, EPA, USDA, NPS | Data processed by the National Hurricane Center (NHC) Sto...





# Storm Surge Modeling: Cat 3

### Storm Surge Inundation (SLOSH Maximum of Maximums)

This web map displays a seamless national map of near worst case storm surge flooding (inundation) scenarios using the National Weather Service (NWS) SLOSH model maximum of maximums (MOMs) product for different hurricane wind categories at a high tide



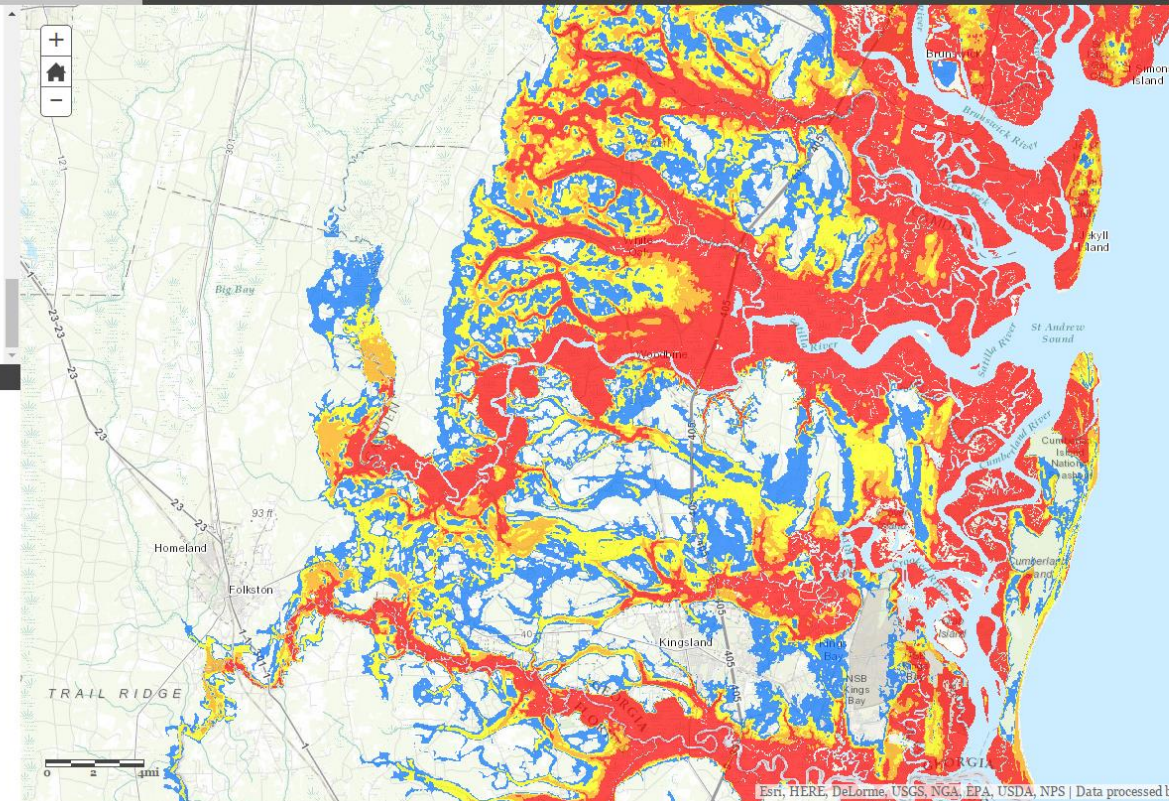
Category 1	Category 2
<p>ent to merge 27 of the operational SLOSH grids to build a seamless national map of storm surge hazard scenarios using the MOM product. Each grid for the Category 1-5 SLOSH MOMs are merged into one national grid. The national grid is then resampled, interpolated, and processed with a DEM (Digital Elevation Model, i.e. topography) to compute the storm surge hazard above ground for each hurricane category.</p>	

The diagonal hatched areas represent certain levee areas, such as the Hurricane and Storm Damage Risk Reduction System in Louisiana. These areas are highly complex and this product should not be used to assess the storm surge hazard within these areas. Please consult local emergency management officials for information on the risk of storm surge flooding within these areas. Not all levee areas are included in this analysis – in particular, local features such as construction walls, levees, berms, pumping systems, or other mitigation systems found at the local level may not be included in this analysis. Additionally, some marshy or low lying areas are not mapped in this analysis.

## LEGEND

**Category 3 (SLOSH MOMs) Storm Surge Inundation**  
Inundation Depth

- Up to 3 feet above ground
- Greater than 3 feet above ground
- Greater than 6 feet above ground
- Greater than 9 feet above ground
- Levee Areas - Consult Local Officials For Flood Risk



Esri, HERE, DeLorme, USGS, NGA, EPA, USDA, NPS | Data processed by the National Hurricane Center (NHC) Sto...





# Storm Surge Modeling: Cat 4

## Storm Surge Inundation (SLOSH Maximum of Maximums)

This web map displays a seamless national map of near worst case storm surge flooding (inundation) scenarios using the National Weather Service (NWS) SLOSH model maximum of maximums (MOMs) product for different hurricane wind categories at a high tide



Category 1 Category 2 Category 3 Category 4 Category 5

Click to merge 2 of the operational SLOSH grids to build a seamless national map of storm surge hazard scenarios using the MOM product. Each grid for the Category 1-5 SLOSH MOMs are merged into one national grid. The national grid is then resampled, interpolated, and processed with a DEM (Digital Elevation Model, i.e. topography) to compute the storm surge hazard above ground for each hurricane category.

The diagonal hatched areas represent certain levee areas, such as the Hurricane and Storm Damage Risk Reduction System in Louisiana. These areas are highly complex and this product should not be used to assess the storm surge hazard within these areas. Please consult local emergency management officials for information on the risk of storm surge flooding within these areas. Not all levee areas are included in this analysis – in particular, local features such as construction walls, levees, berms, pumping systems, or other mitigation systems found at the local level may not be included in this analysis. Additionally, some marshy or low lying areas are not mapped in this analysis.

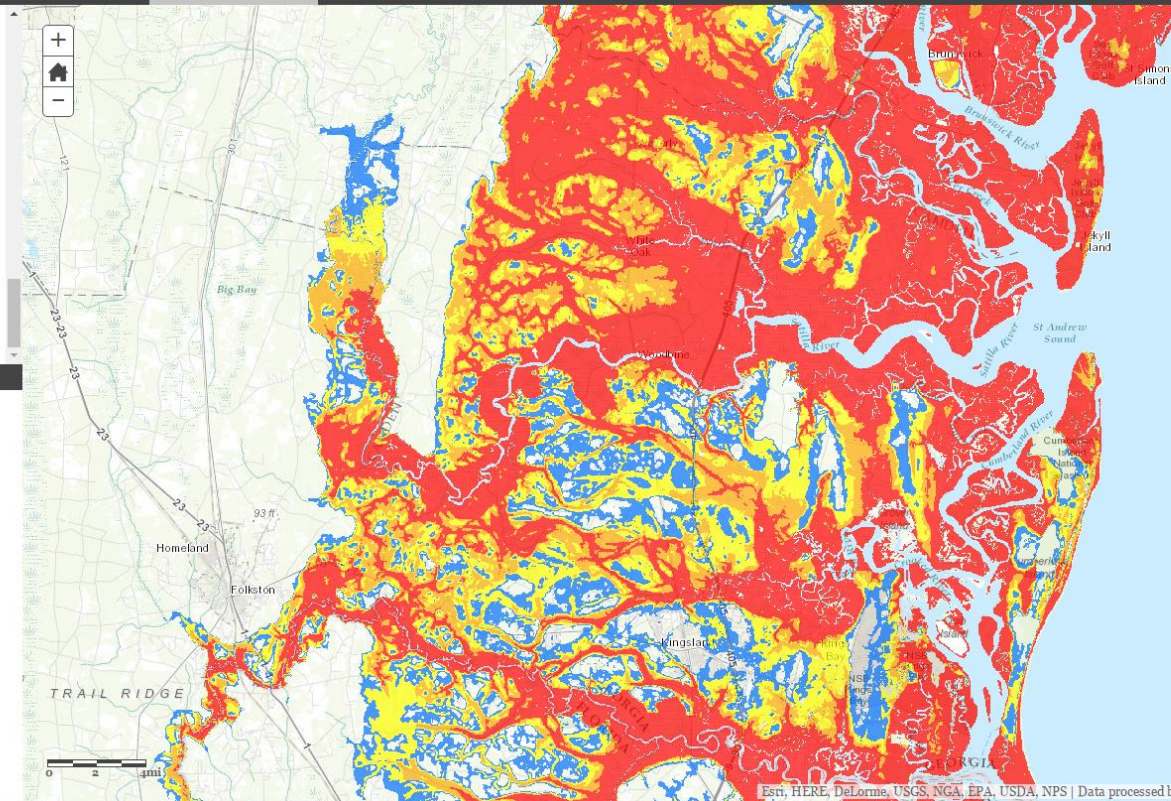
### LEGEND

#### Category 4 (SLOSH MOMs) Storm Surge Inundation

##### Inundation Depth

- Up to 3 feet above ground
- Greater than 3 feet above ground
- Greater than 6 feet above ground
- Greater than 9 feet above ground

Levee Areas - Consult Local Officials For Flood Risk



Esri, HERE, DeLorme, USGS, NGA, EPA, USDA, NPS | Data processed by the National Hurricane Center (NHC) Sto...





# Storm Surge Modeling: Cat 5

## Storm Surge Inundation (SLOSH Maximum of Maximums)

This web map displays a seamless national map of near worst case storm surge flooding (inundation) scenarios using the National Weather Service (NWS) SLOSH model maximum of maximums (MOMs) product for different hurricane wind categories at a high tide



Category 1 Category 2 Category 3 Category 4 Category 5

Click to merge 2 of the operational SLOSH grids to build a seamless national map of storm surge hazard scenarios using the MOM product. Each grid for the Category 1-5 SLOSH MOMs are merged into one national grid. The national grid is then resampled, interpolated, and processed with a DEM (Digital Elevation Model, i.e. topography) to compute the storm surge hazard above ground for each hurricane category.

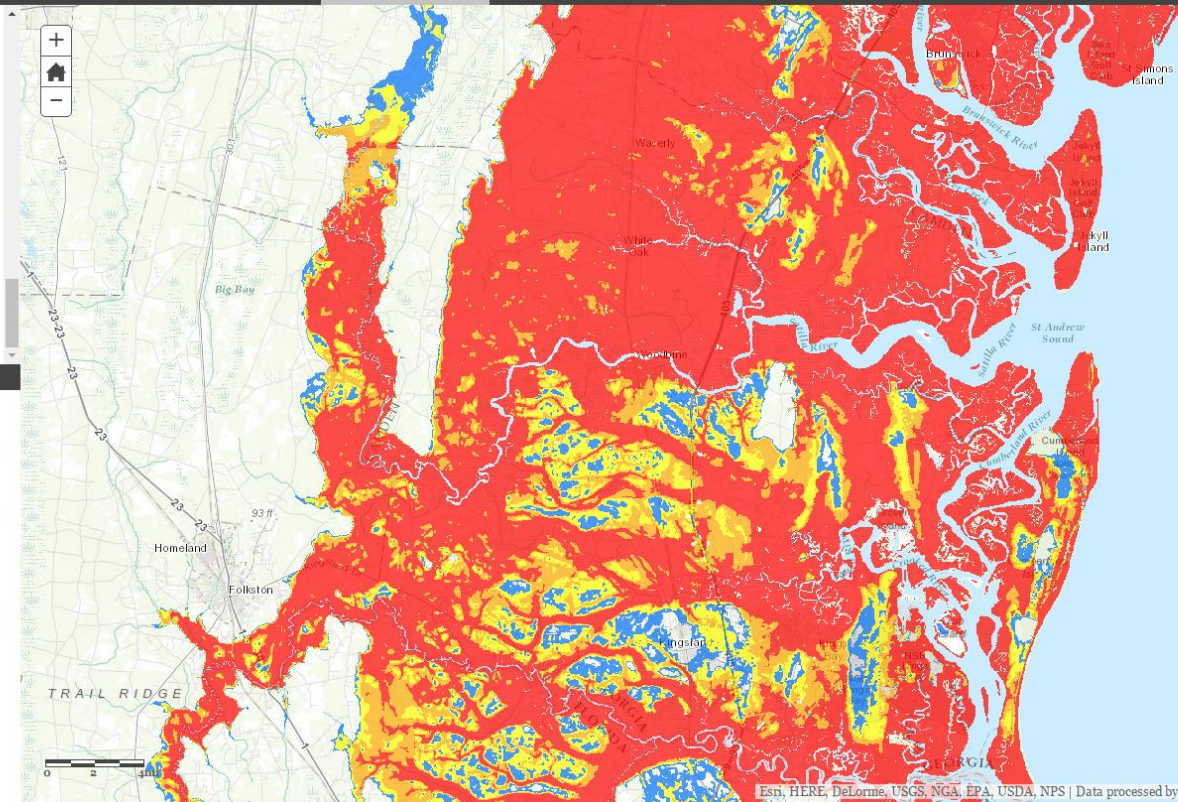
The diagonal hatched areas represent certain levee areas, such as the Hurricane and Storm Damage Risk Reduction System in Louisiana. These areas are highly complex and this product should not be used to assess the storm surge hazard within these areas. Please consult local emergency management officials for information on the risk of storm surge flooding within these areas. Not all levee areas are included in this analysis – in particular, local features such as construction walls, levees, berms, pumping systems, or other mitigation systems found at the local level may not be included in this analysis. Additionally, some marshy or low lying areas are not mapped in this analysis.

### LEGEND

#### Category 5 (SLOSH MOMs) Storm Surge Inundation Inundation Depth

- Up to 3 feet above ground
- Greater than 3 feet above ground
- Greater than 6 feet above ground
- Greater than 9 feet above ground

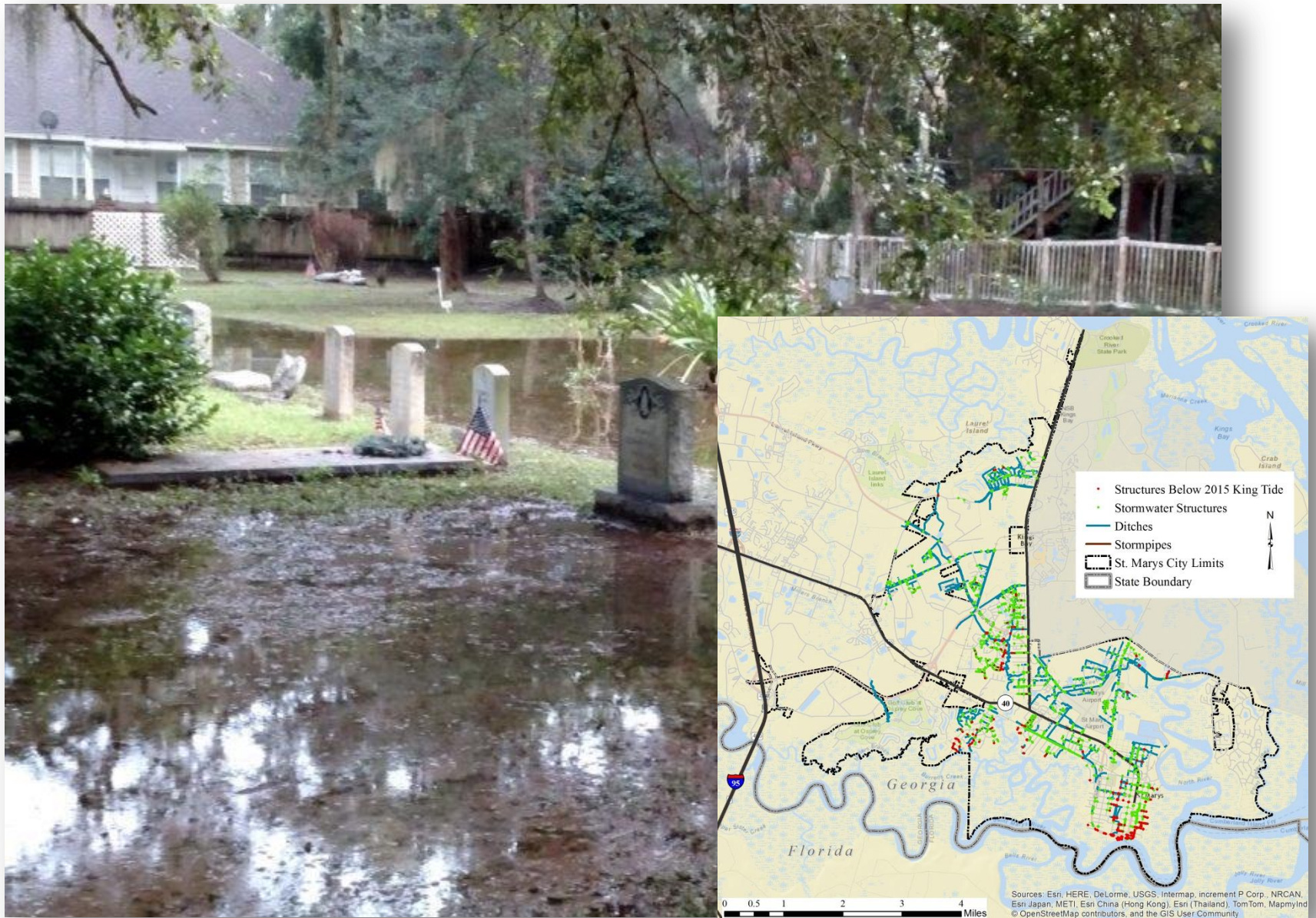
Levee Areas - Consult Local Officials For Flood Risk



Esri, HERE, DeLorme, USGS, NGA, EPA, USDA, NPS | Data processed by the National Hurricane Center (NHC) Sto...

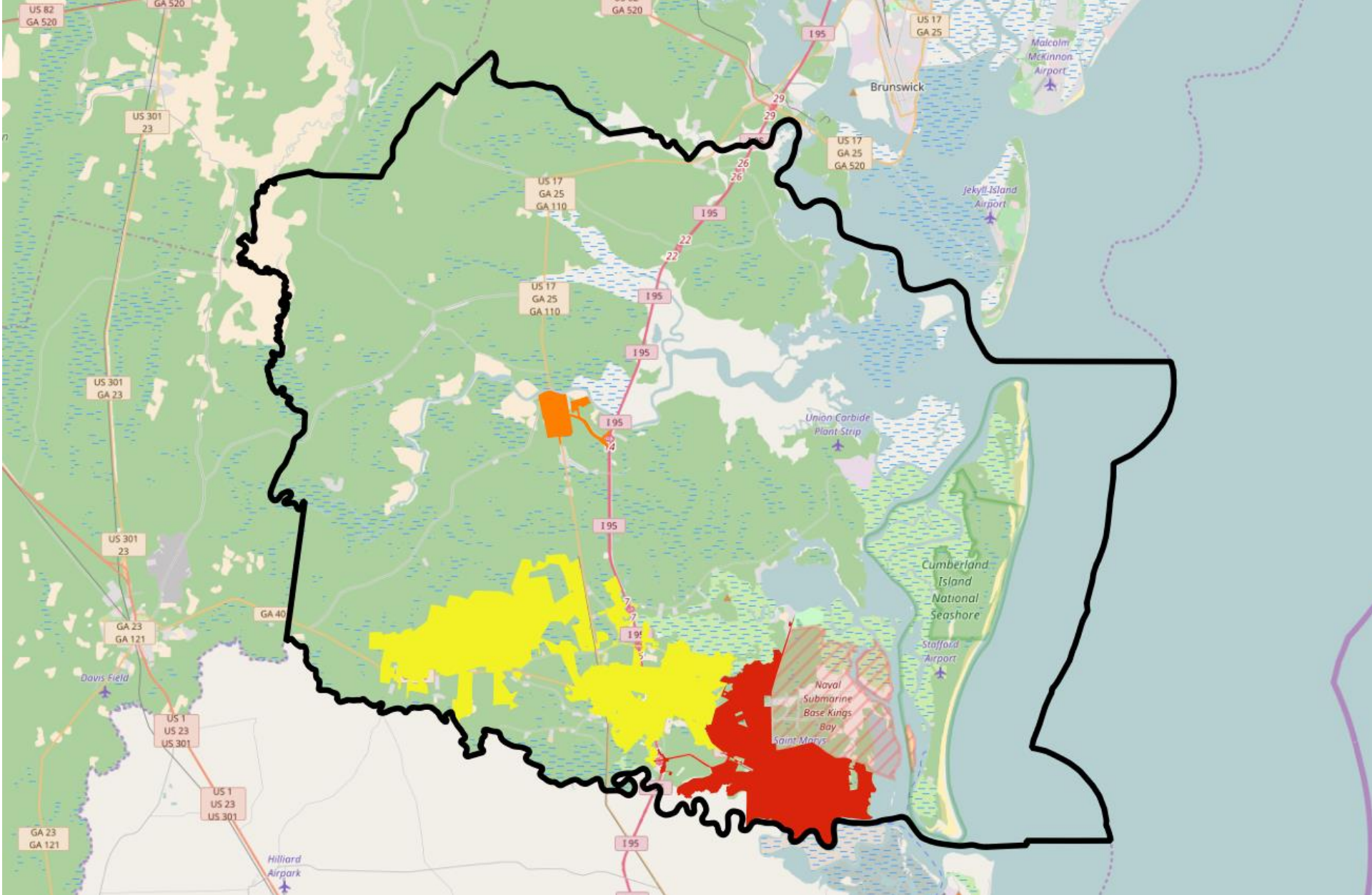




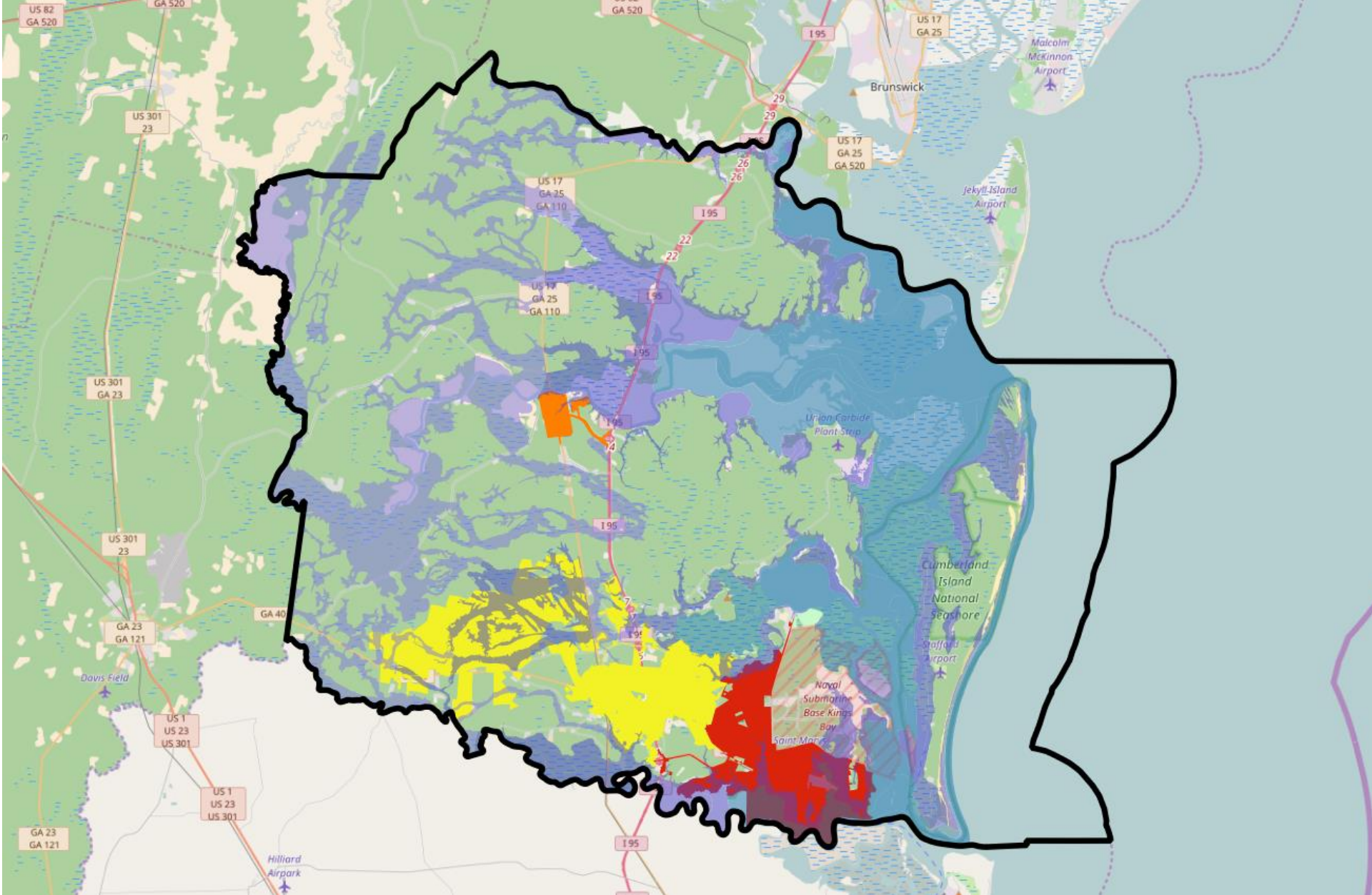


Region 2030



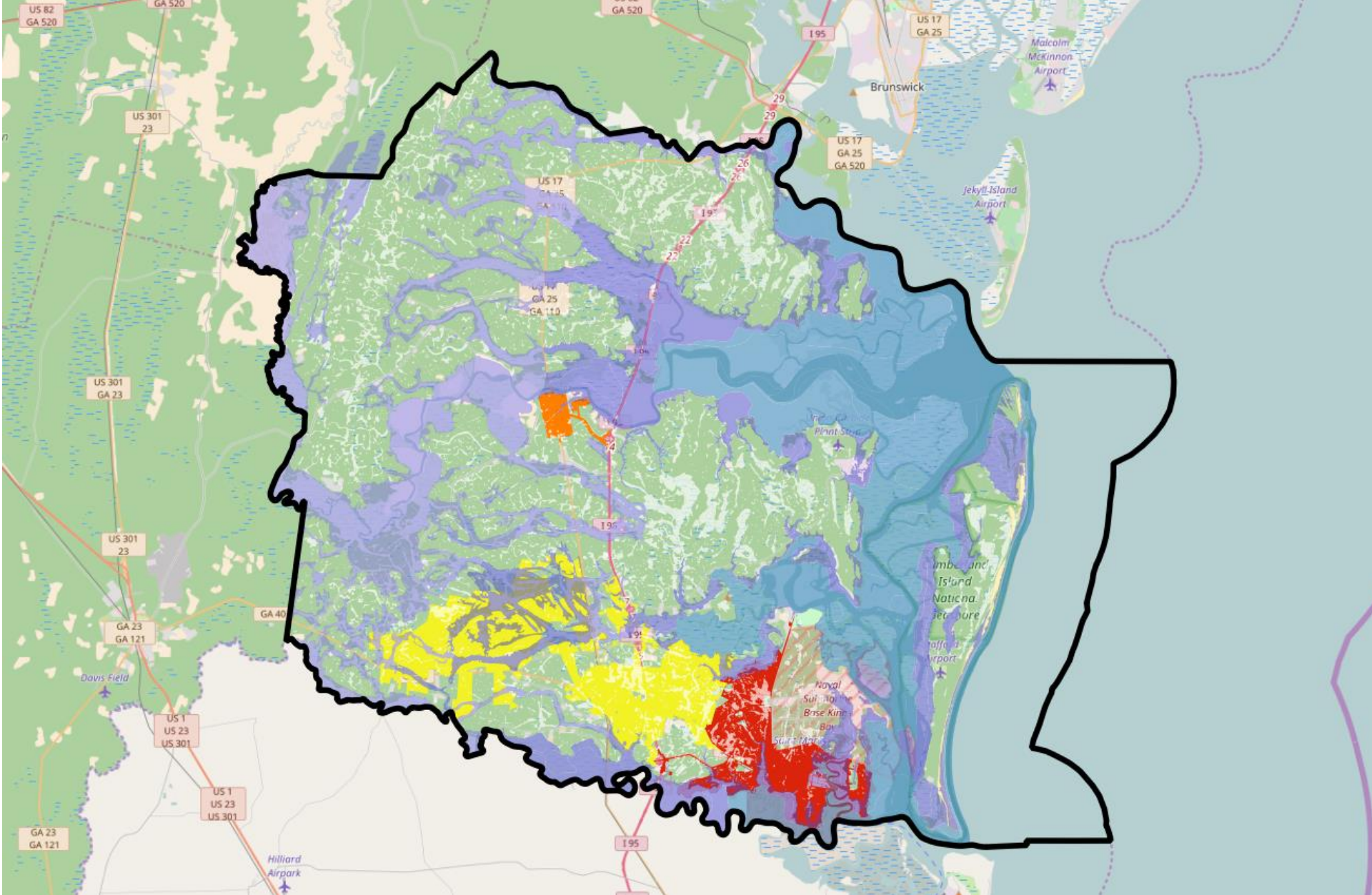


Cities 2010



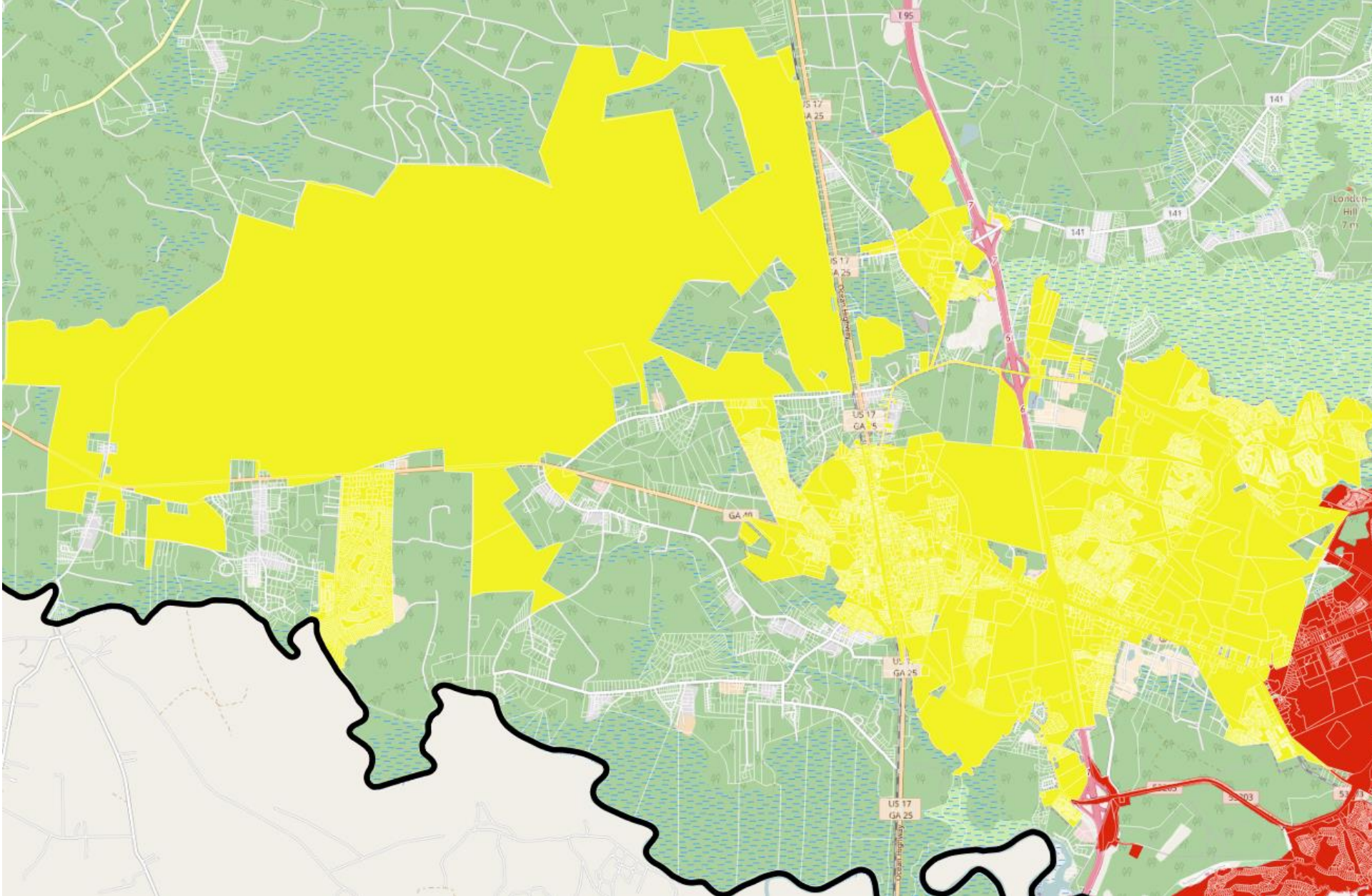
Cities 2010





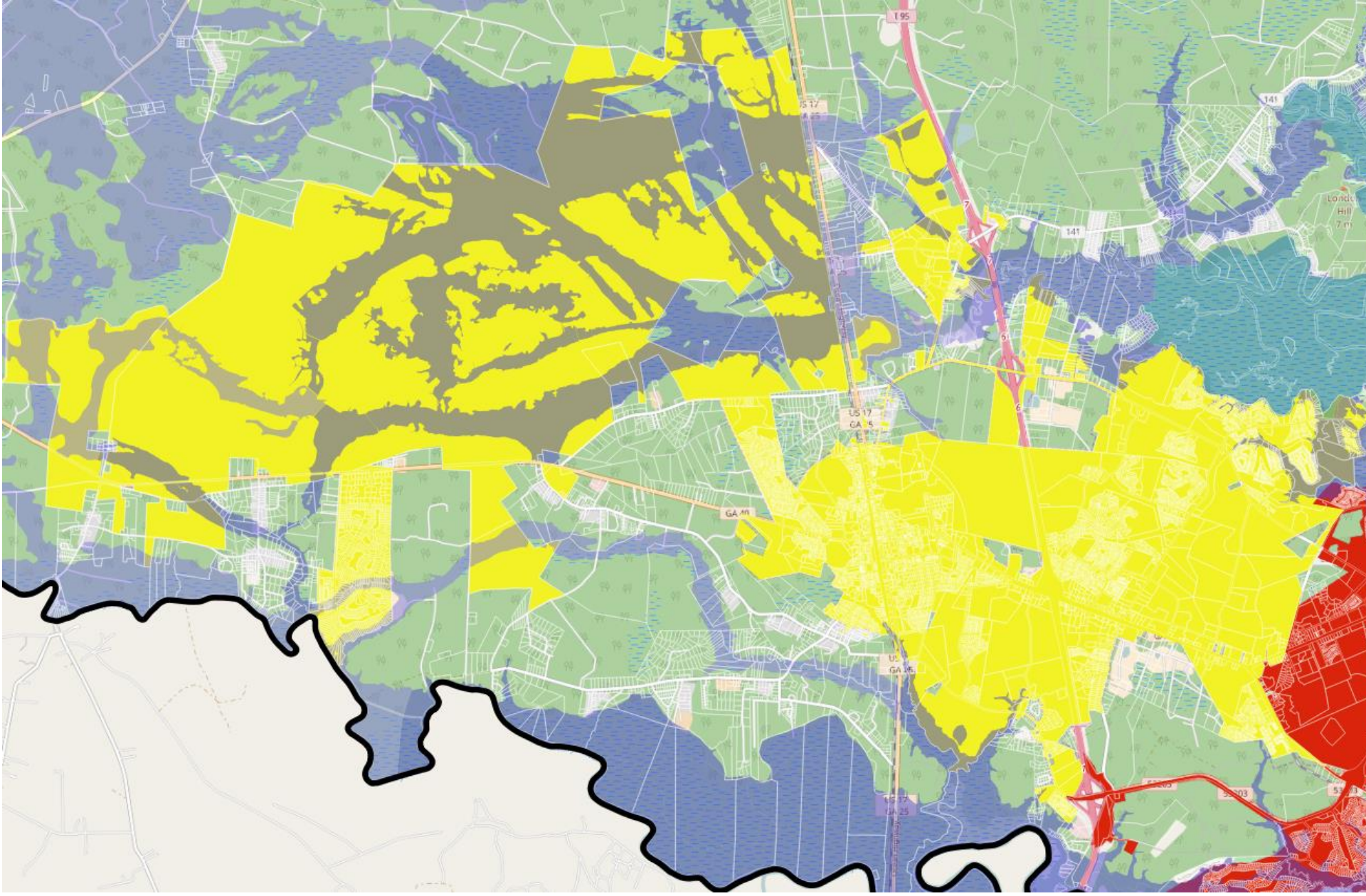
Cities 2010





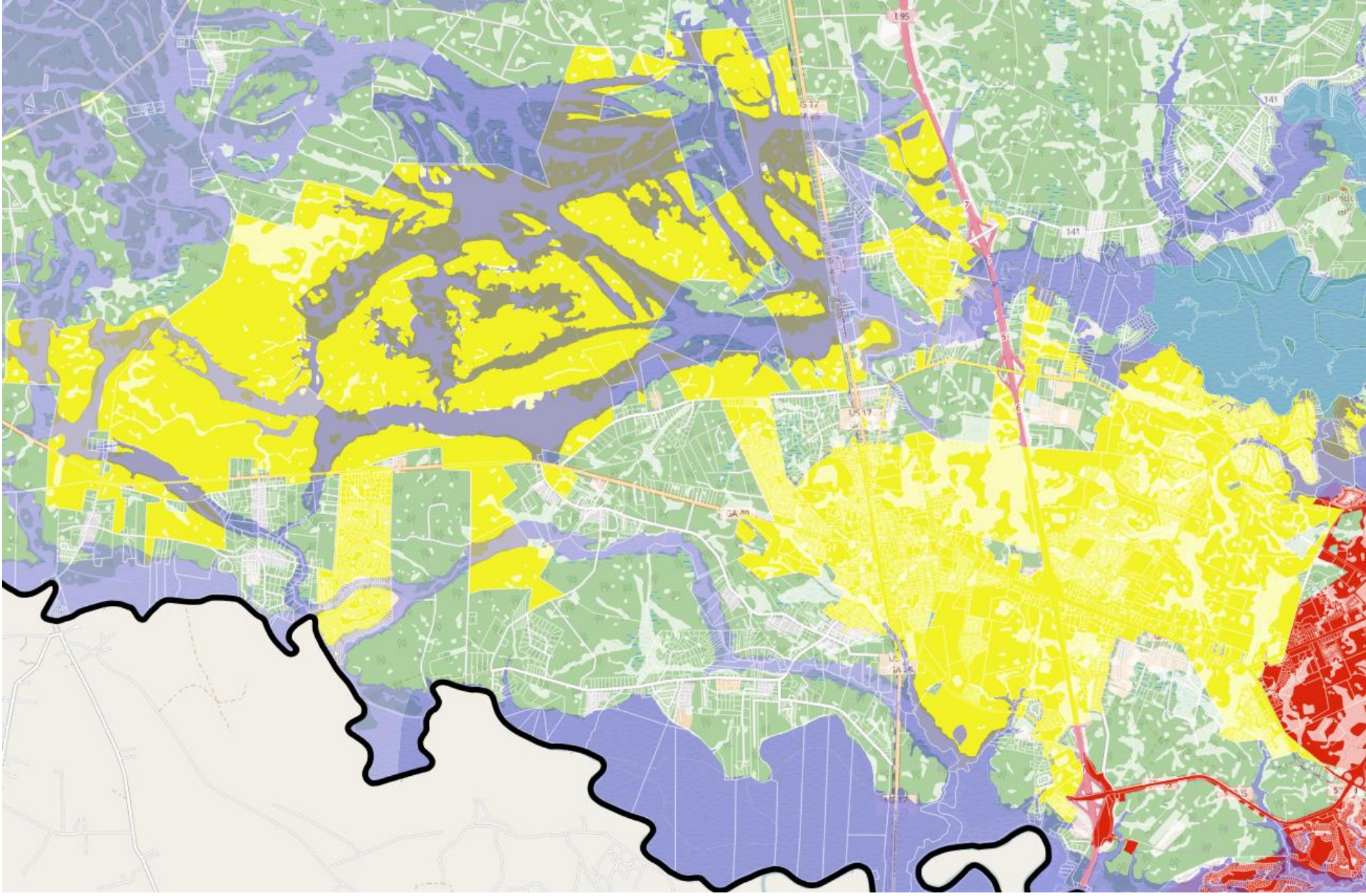
Kingsland 2010





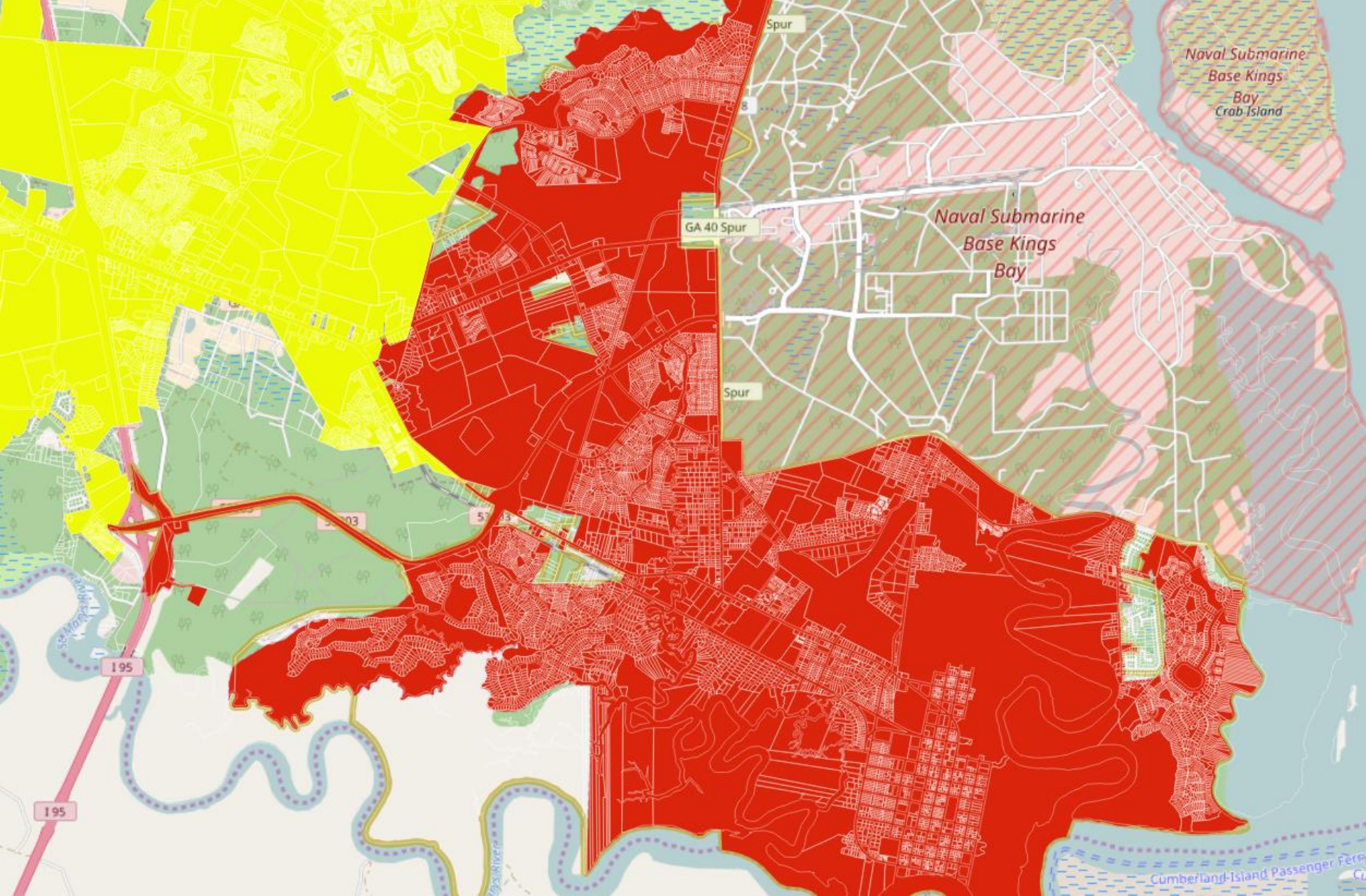
Kingsland 2010





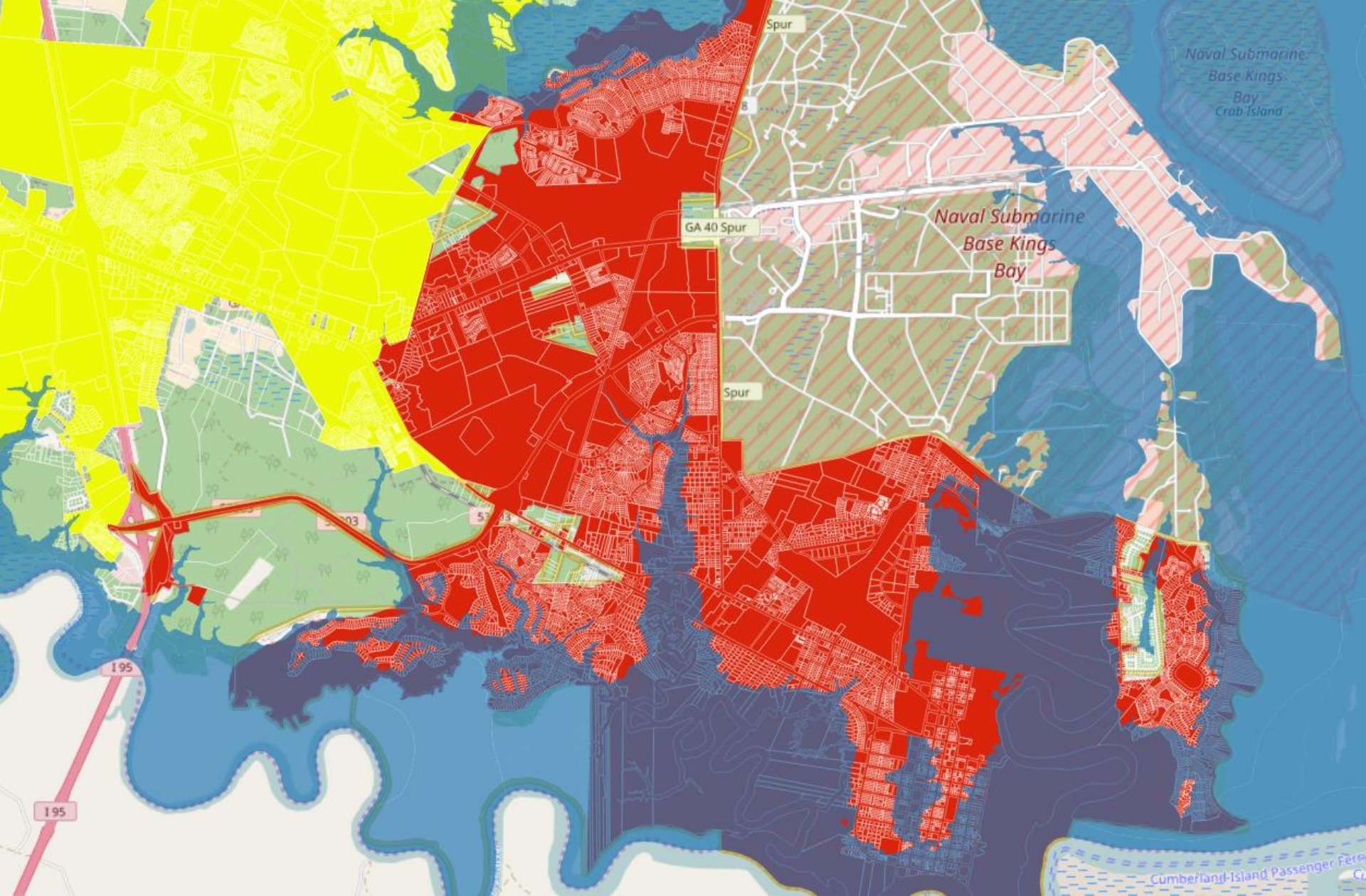
Kingsland 2010





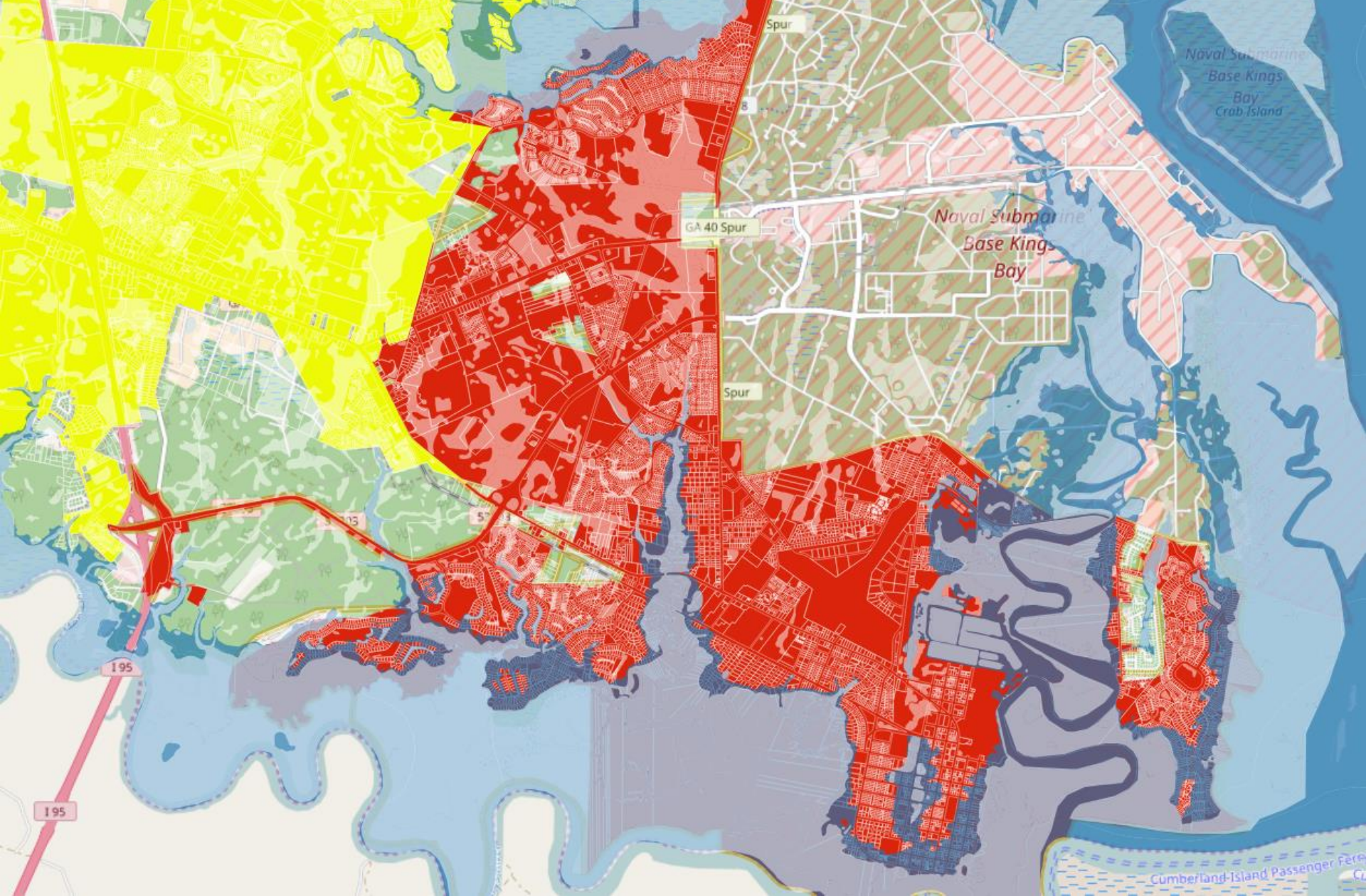
St. Marys 2010





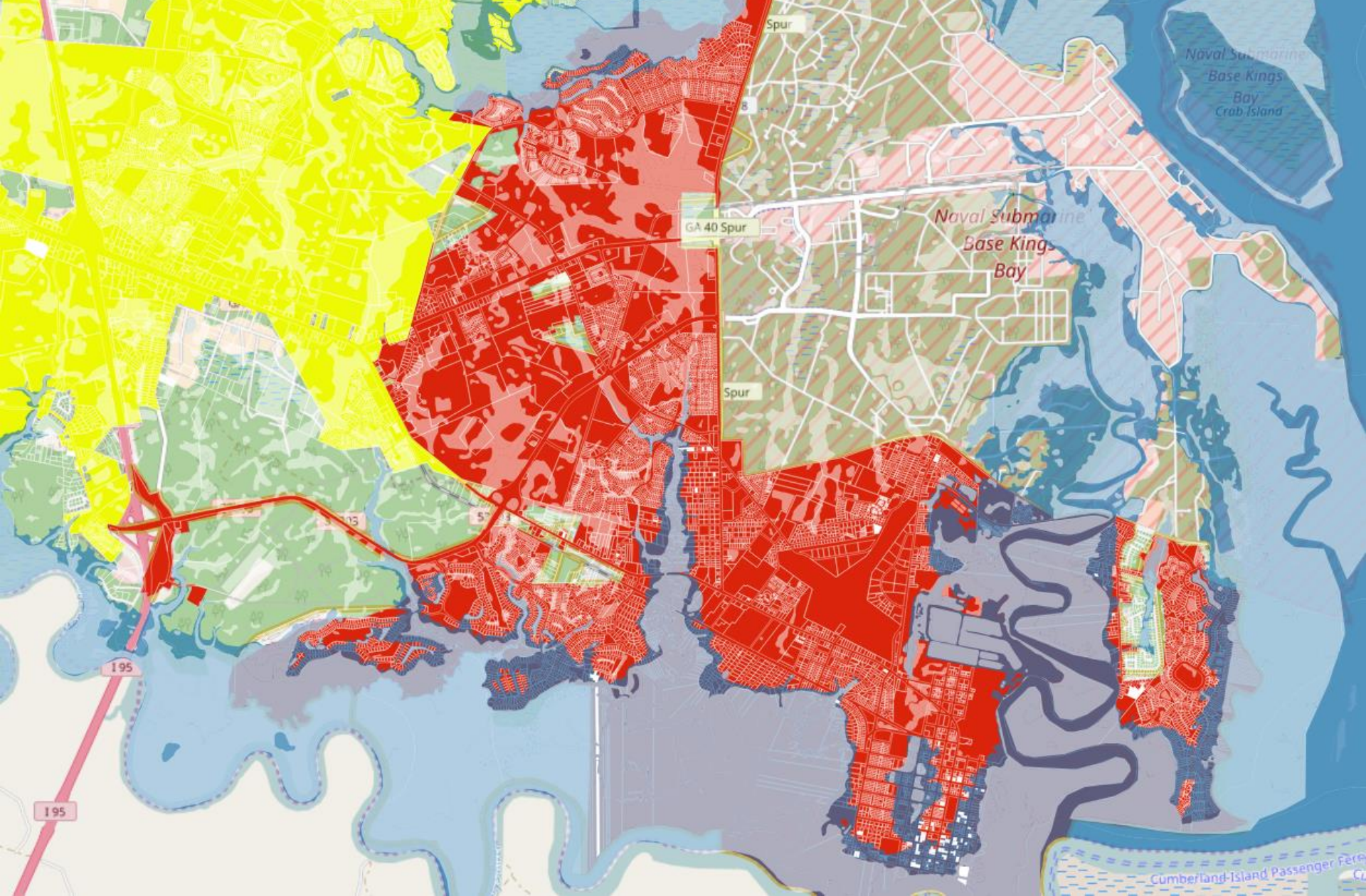
St. Marys 2010





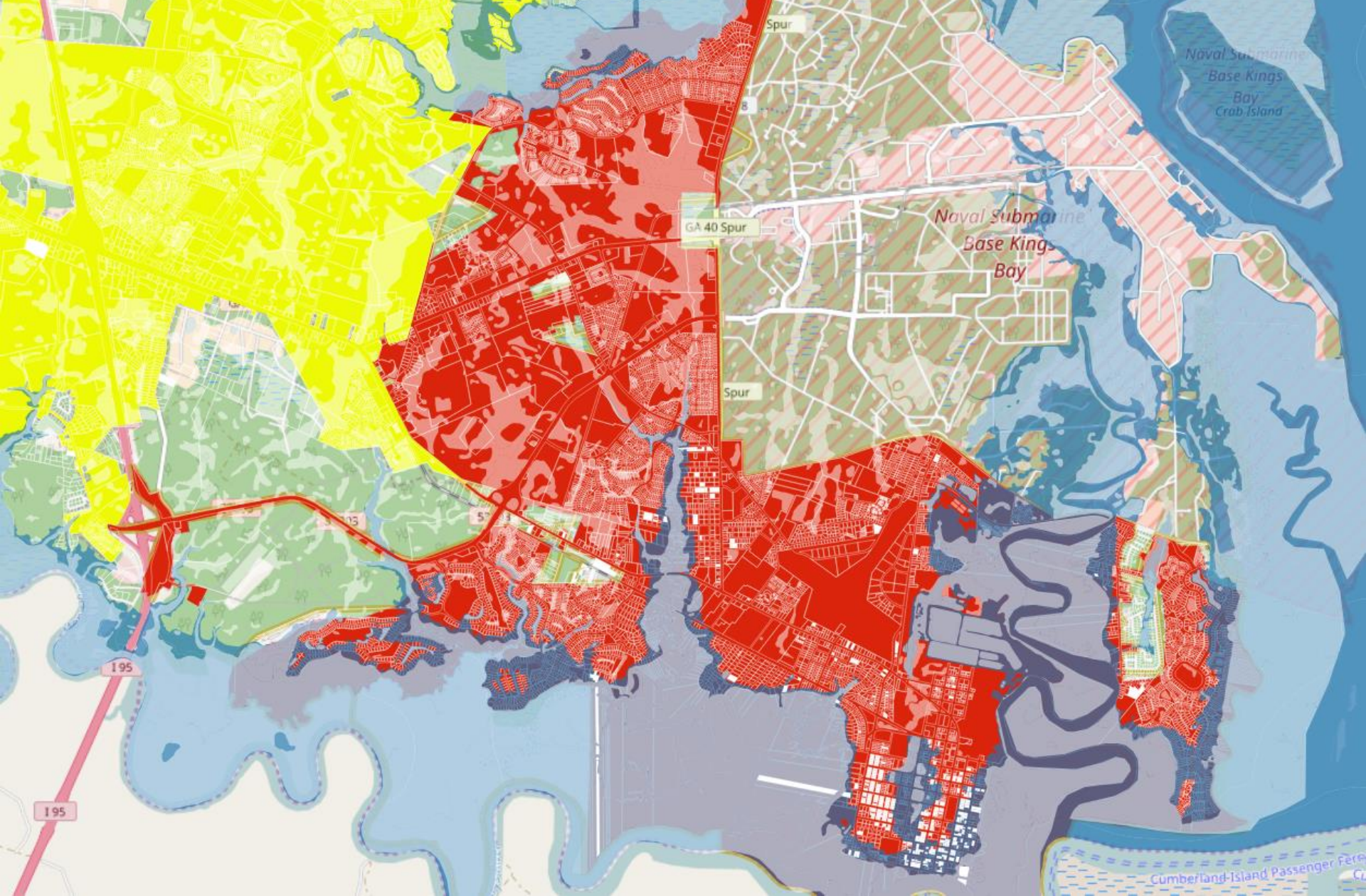
St. Marys 2010





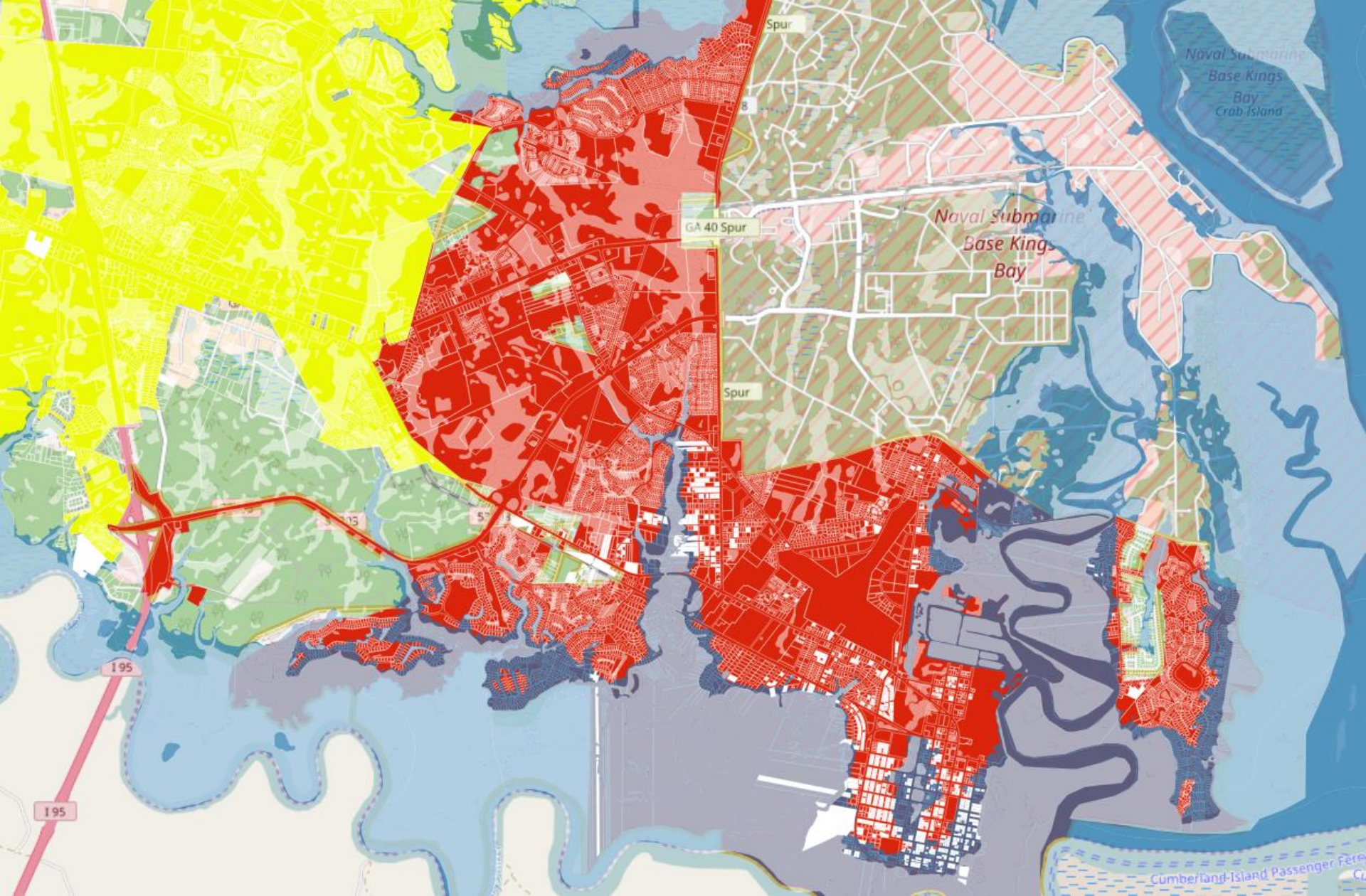
St. Marys 1949





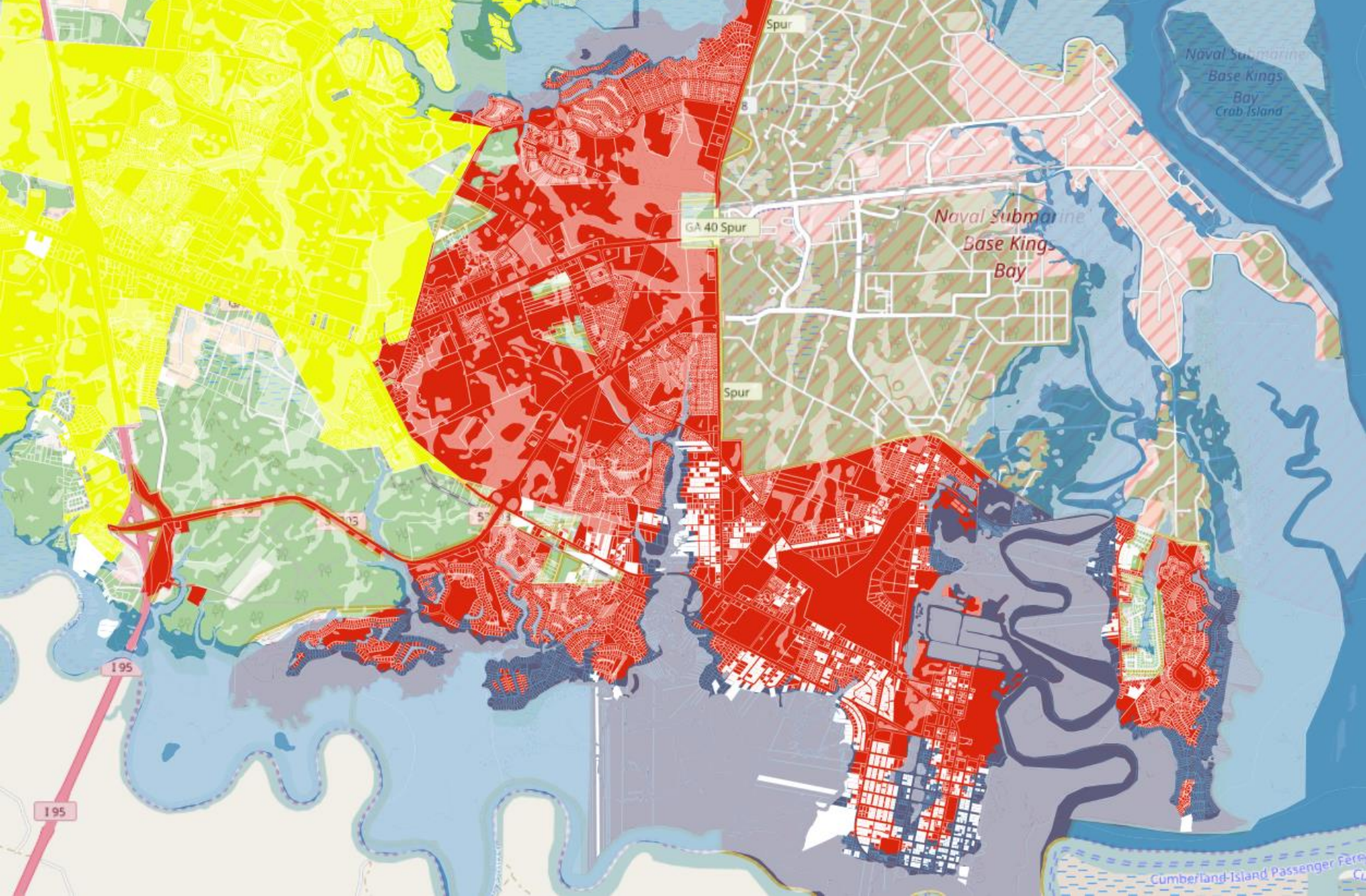
St. Marys 1959





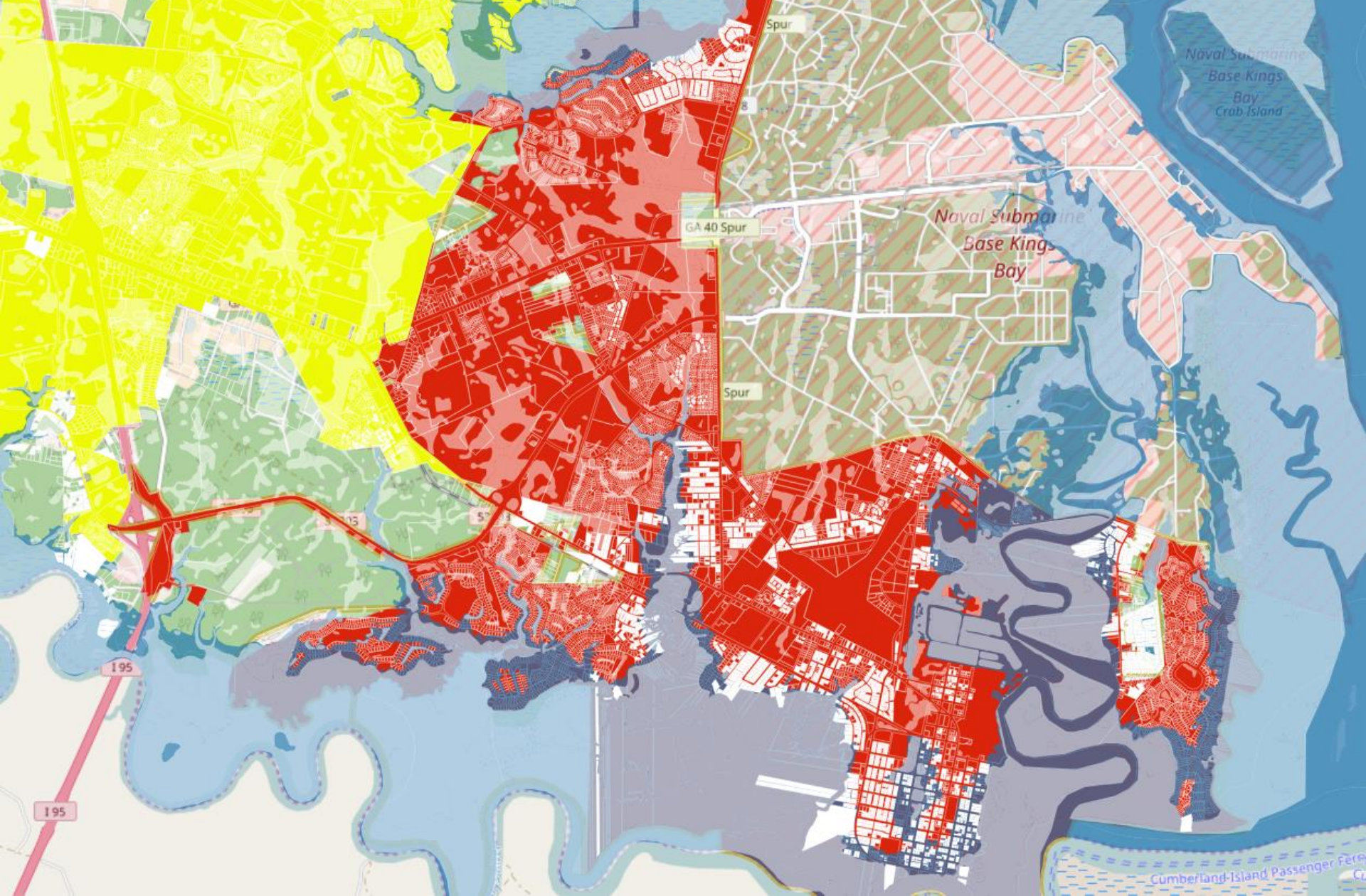
St. Marys 1969





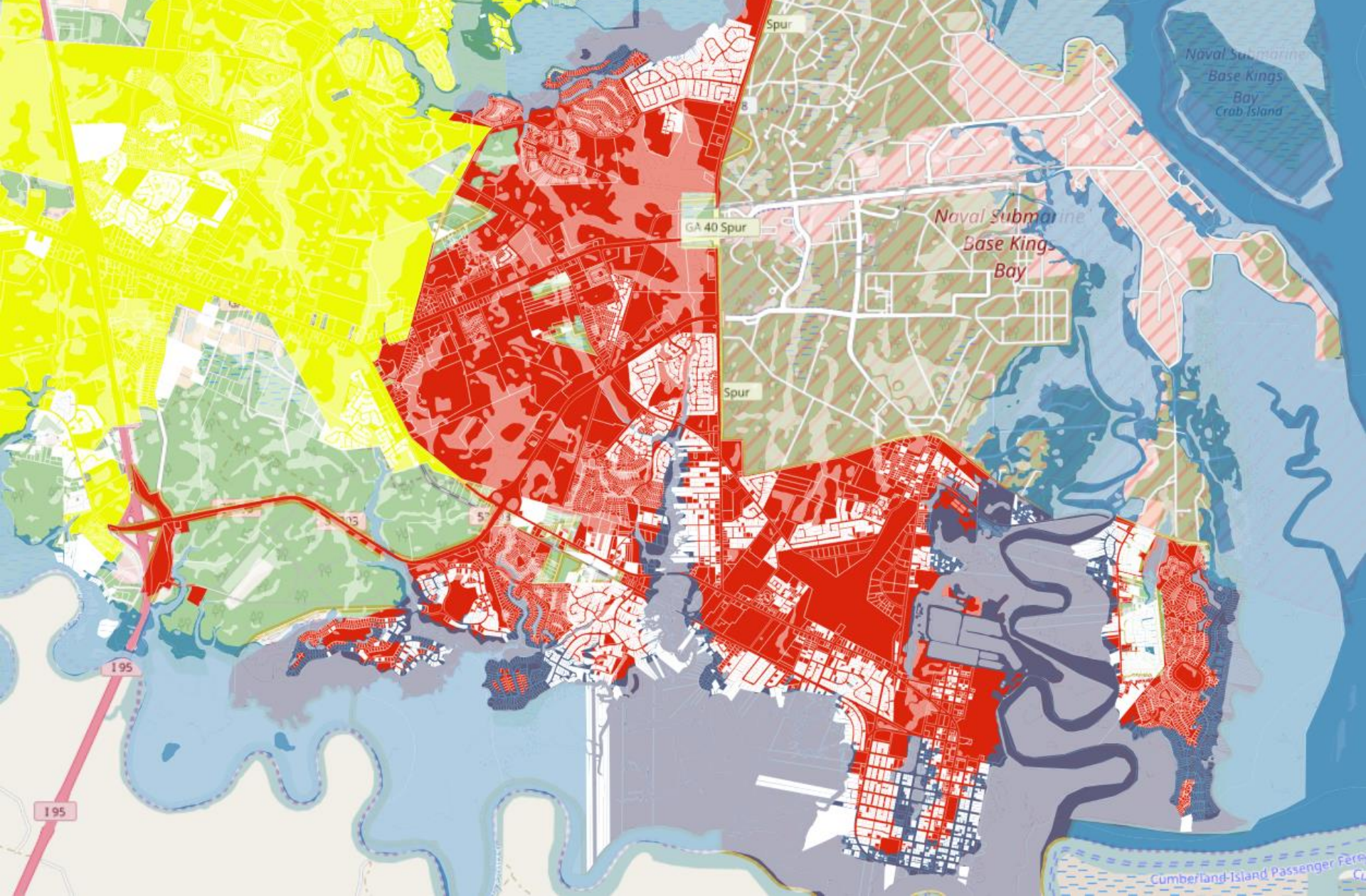
St. Marys 1979





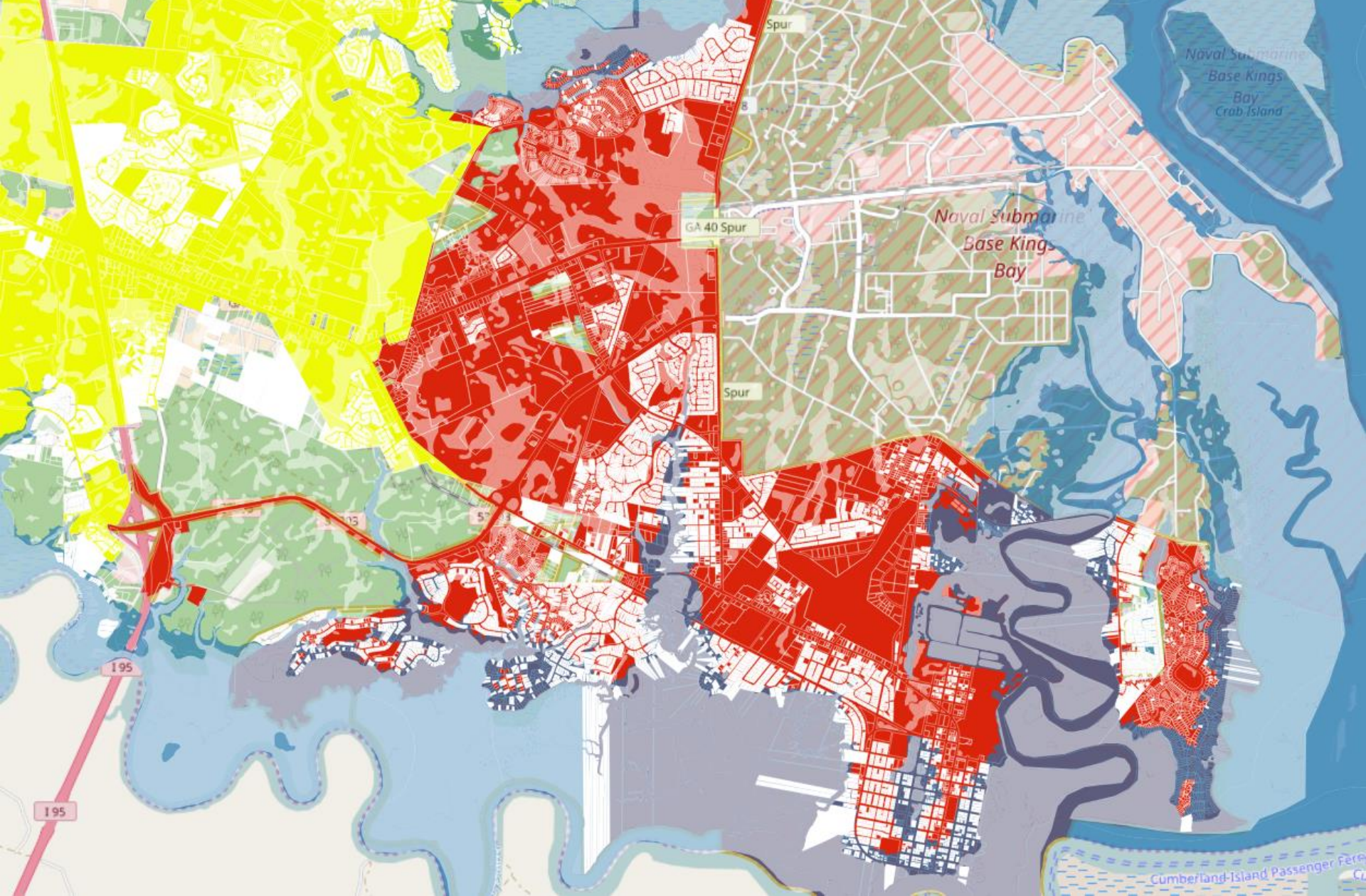
St. Marys 1989





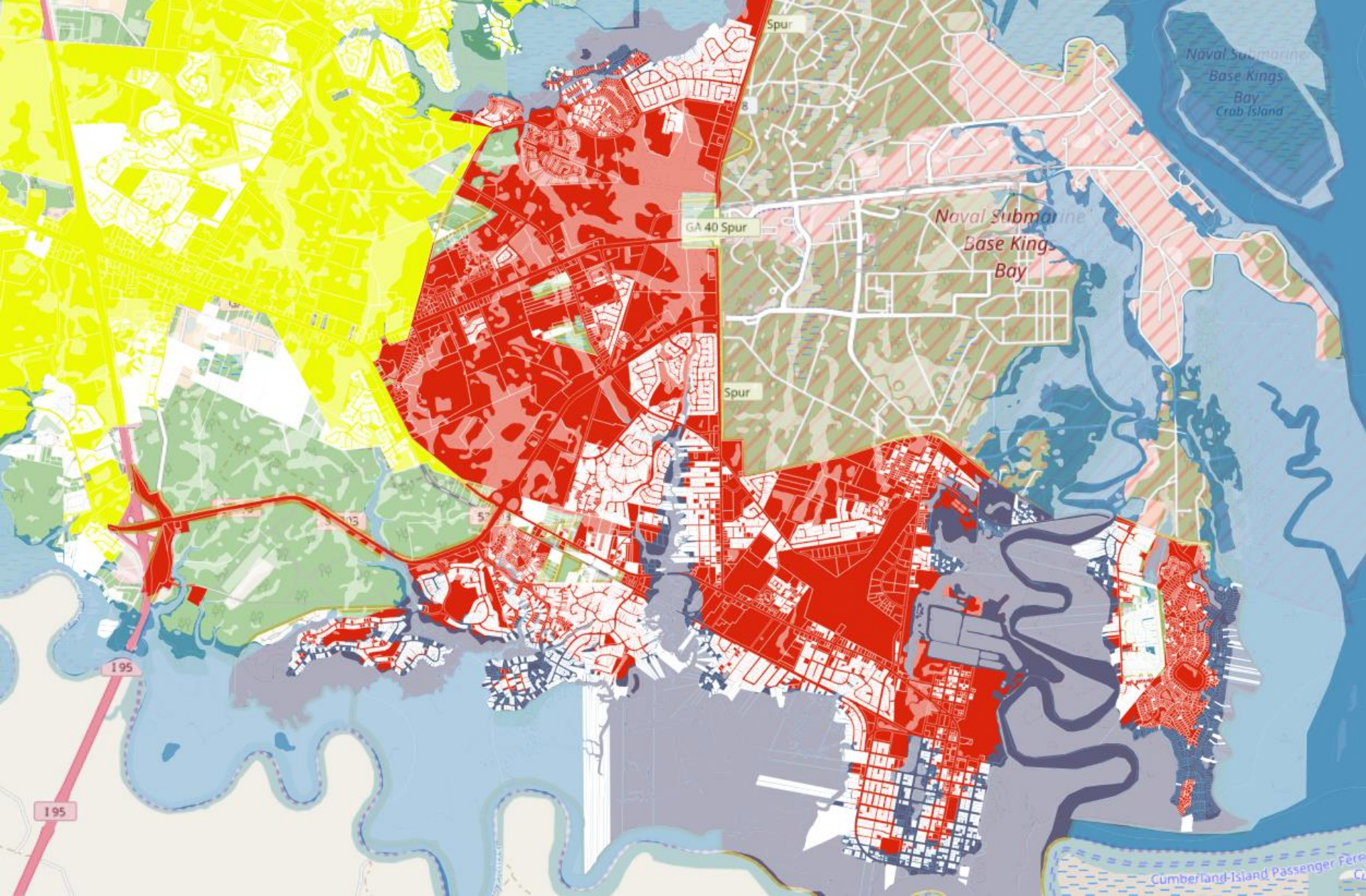
St. Marys 1999





St. Marys 2009

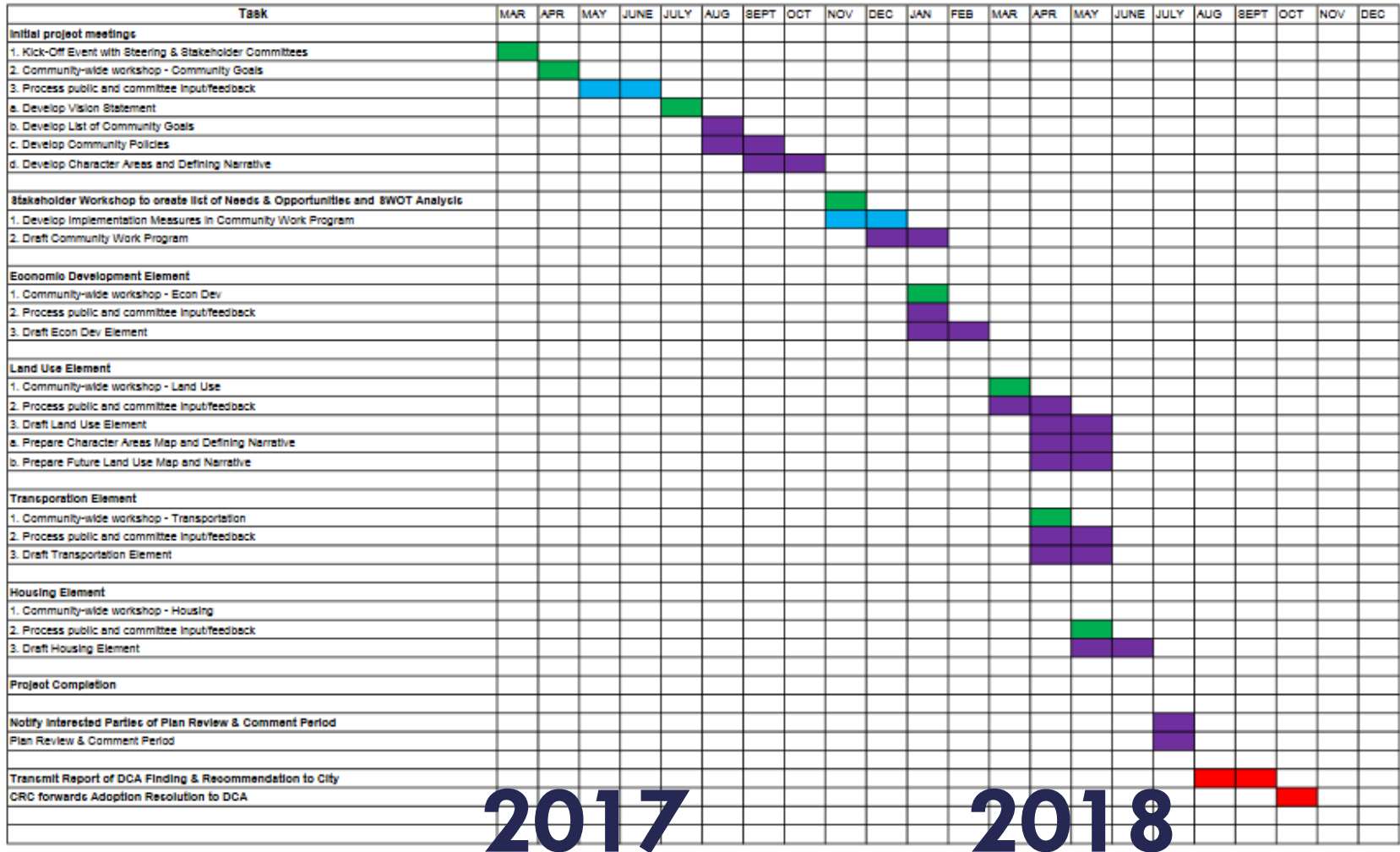




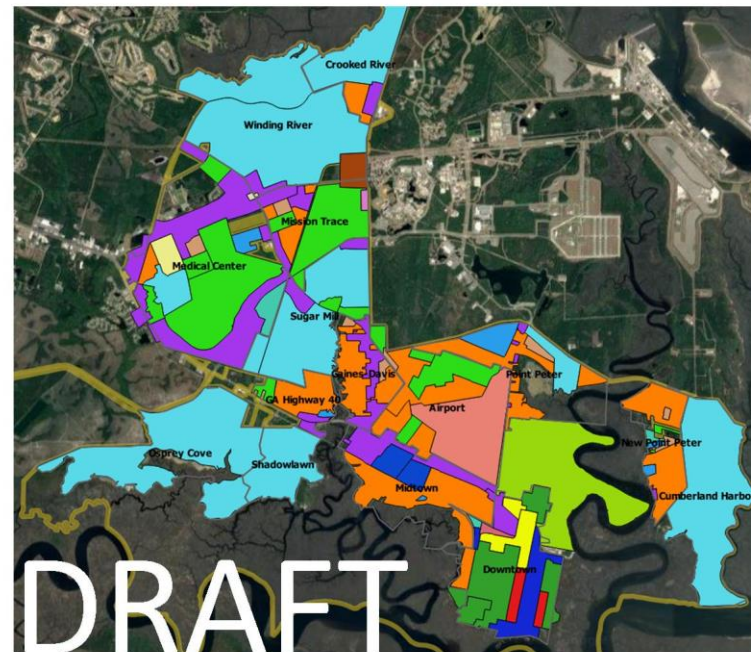
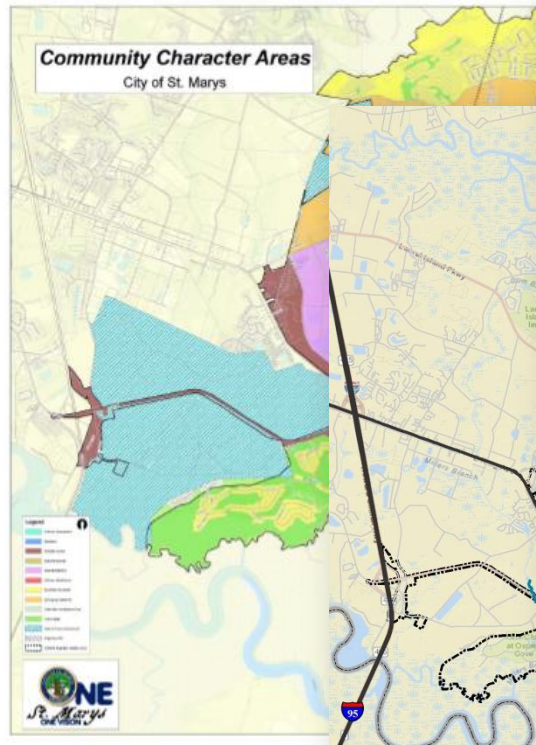
St. Marys 2015



# Timeline



# Why Plan?



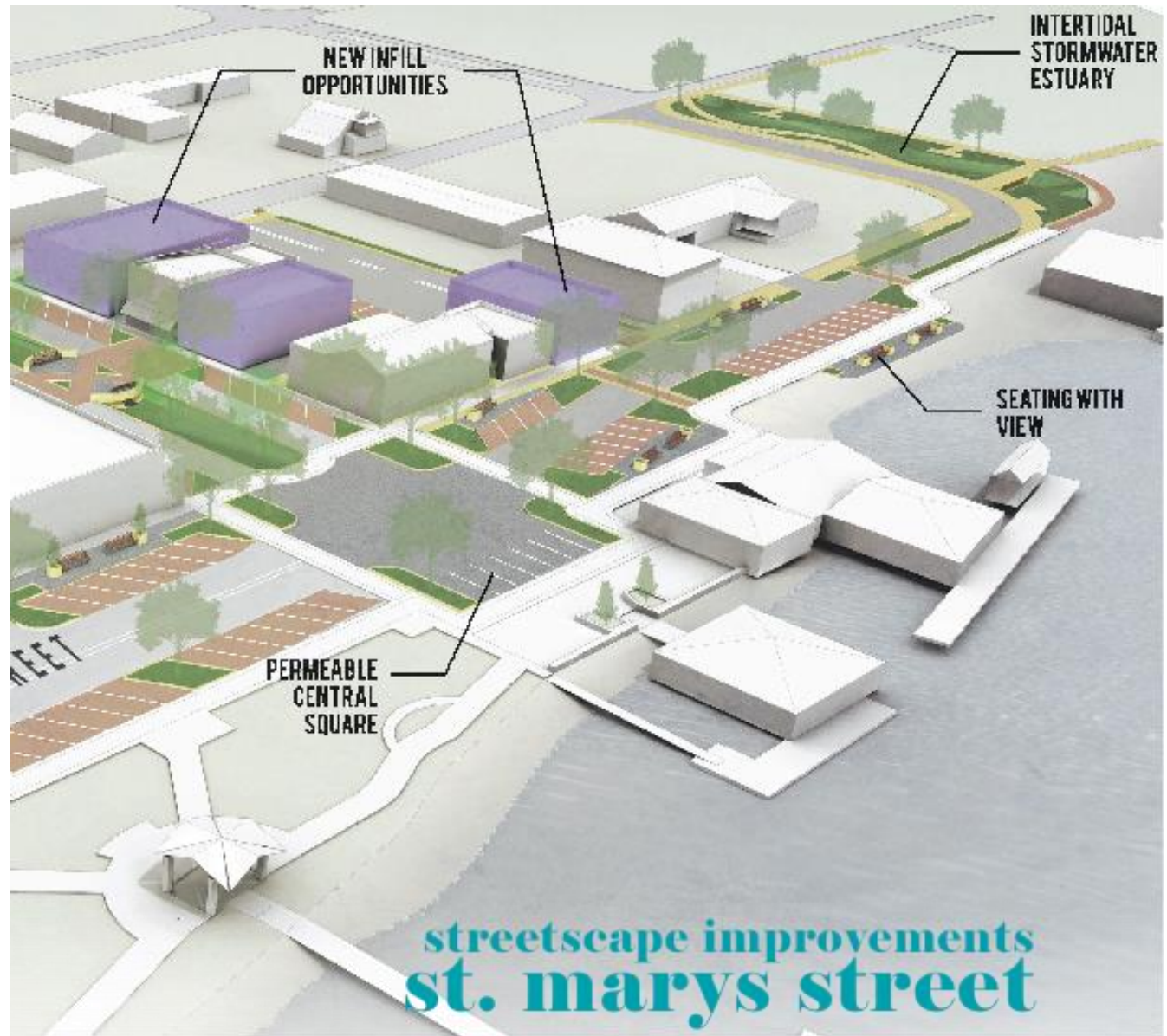
**Proposed Zoning**

May 2017

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



# Stormwater Management:



# Waterfront Streetscape Improvements:



## IMMEDIATE RELEASE

### MEDIA CONTACT:

Mr. John Holman, City Manager  
912.510.4041, [john.holman@stmarysga.gov](mailto:john.holman@stmarysga.gov)

### CITY OF ST. MARYS RECOMMENDED FOR GRANT IN THE AMOUNT OF \$382,333 Section 319(h) Nonpoint Source Implementation Grant for Fiscal Year 2017

ST. MARYS, Ga., (May 9, 2017) –

The City of St. Marys is pleased to announce that the Georgia Environmental Protection Division has recommended to the U.S. Environmental Protection Agency for funding the City of St. Marys' 319(h) grant application in the amount of \$382,333 for coastal urban storm water BMP retrofits in downtown St. Marys. This project is recommended to be funded in part through a grant from the Georgia Environmental Protection Division as authorized by the U.S. Environmental Protection Agency under the Provisions of Section 319(h) of the Federal Water Pollution Control Act, as amended.

The many planning efforts of the City, including the **Sea Rise Study** partnered with \_\_\_\_\_, the downtown renaissance visioning and strategic plan and the current master planning process included storm water retrofits for the downtown area. The overarching goal of these improvements and the proposed project is to address non-point source pollution and flooding related to urban runoff in downtown St. Marys. The City plans to achieve these goals by enhancing the current design plans for downtown improvements through the installation of permeable pavement in the parking stalls



# Thanks!



[onestmarys.com](http://onestmarys.com)